

Governor's 2015 Biennium Executive Budget Volume 4

TREASURE STATE ENDOWMENT PROGRAM 2015 Biennium Project Funding Recommendations 2013 Biennium Emergency, Planning, and Project Grants Report



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2015 Biennium TSEP Projects Recommended for Funding

The Department of Commerce (Commerce) administers the Treasure State Endowment Program (TSEP) Grant Program, created by Legislative Referendum 110 in 1992 and codified at Sections 90-7-701, *et seq.*, MCA. TSEP provides a competitive grant program for (1) matching infrastructure construction grants; (2) matching planning grants; and (3) emergency grants for local governments as defined in Section 90-6-701, MCA (cities, towns, counties, consolidated local governments, tribal governments, and county or multi-county water, sewer, or solid waste districts).

TSEP grants are funded with the interest earned on the corpus of the treasure state endowment fund, which comes from a portion of the coal severance tax.

TSEP project grants are available on a competitive basis for: construction or upgrades to drinking water systems, wastewater treatment facilities, sanitary or storm sewer systems, solid waste disposal and separation systems, and bridges.

Commerce received 66 grant applications for 2015 Biennium TSEP infrastructure construction grants, seeking \$36,499,984 in funds for 32 wastewater projects, 17 bridges, 15 water projects, one water & wastewater project, and one storm water project. Staff reviewed and ranked the applications based on the criteria set forth in the TSEP Application Guidelines and Administration Manual, and prioritized the applications as forth in Section 90-6-710, MCA. In accordance with the language of HB 351 (Chapter 389, Laws 2011), staff reviewed and ranked applications for bridge projects separately from all other infrastructure projects.

Commerce Director Dore Schwinden submitted two final lists of recommended projects (one for bridges and one for all other infrastructure projects) with the amount of recommended financial assistance for each project to the Governor. The Governor reviewed the projects recommended by Commerce and will submit to the Legislature two lists of recommendations for projects and the amount of financial assistance for each project (HB 11). The recommendations include 10 water infrastructure projects, 14 wastewater infrastructure projects, 1 water and wastewater project, and 6 bridge projects. The Governor recommends these 31 projects be funded in the amounts shown below, for a total project grant appropriation of \$18,342,366. The TSEP statute provides that the Legislature will make the final decisions on funding awards and make the necessary appropriations for those grants.

Individual score sheets for applications and summaries for applications not recommended for funding are available upon request.

Treasure State Endowment Program
Water and Wastewater Project Recommendations for 2015 Biennium

Rank	Applicant	County	Project Description	TSEP Funds Requested	TSEP Funds Eligible	Cumulative Proposed Award
1	Craig Co Water Sewer District	Lewis & Clark	Wastewater	\$750,000	\$750,000	\$ 750,000
2	Glendive	Dawson	Wastewater	\$750,000	\$625,000	\$ 1,375,000
3	Manhattan	Gallatin	Water	\$750,000	\$750,000	\$ 2,125,000
4	Cascade	Cascade	Water	\$750,000	\$750,000	\$ 2,875,000
5	Pinesdale	Ravalli	Water	\$750,000	\$750,000	\$ 3,625,000
6	Musselshell Co Water Sewer District	Musselshell	Water	\$450,125	\$450,125	\$ 4,075,125
7	Valier	Pondera	Wastewater	\$750,000	\$750,000	\$ 4,825,125
8	Hill County – North Havre	Hill	Wastewater	\$317,250	\$211,500	\$ 5,036,625
9	Hot Springs	Sanders	Water	\$592,550	\$592,550	\$ 5,629,175
10	Custer County RID #1	Custer	Wastewater	\$750,000	\$750,000	\$ 6,379,175
11	Chinook	Blaine	Water	\$750,000	\$750,000	\$ 7,129,175
12	Roundup	Musselshell	Water	\$500,000	\$500,000	\$ 7,629,175
13	Dawson Co/West Glendive	Dawson	Wastewater	\$750,000	\$750,000	\$ 8,379,175
14	Seeley Lake Sewer District	Missoula	Wastewater	\$750,000	\$750,000	\$ 9,129,175
15	Three Forks	Gallatin	Wastewater	\$750,000	\$750,000	\$ 9,879,175
16	Libby	Lincoln	Water	\$750,000	\$750,000	\$10,629,175
17	South Wind WSD	Cascade	Water & Wastewater	\$750,000	\$750,000	\$11,379,175
18	Richland County	Richland	Wastewater	\$750,000	\$750,000	\$12,129,175
19	Amsterdam/Churchill Sewer District	Gallatin	Wastewater	\$750,000	\$750,000	\$12,879,175
20	Philipsburg	Granite	Water	\$550,000	\$550,000	\$13,429,175
21	Dutton	Teton	Water	\$408,500	\$408,500	\$13,837,675
22	Fort Benton	Chouteau	Wastewater	\$750,000	\$750,000	\$14,587,675
23	Moore	Fergus	Wastewater	\$750,000	\$625,000	\$15,212,675
24	Forsyth	Rosebud	Wastewater	\$500,000	\$500,000	\$15,712,675
25	Vaughn	Cascade	Wastewater	\$750,000	\$750,000	\$16,462,675
Totals				\$18,193,425	\$16,462,675	\$16,462,675

Bridge Project Recommendations for the 2015 Biennium

Rank	Applicant	County	Project Type	Amount TSEP Requested	Amount TSEP Eligible	Cumulative Proposed Award
1	Missoula County	Missoula	Bridge	\$480,372	\$480,372	\$480,372
2	Lewis & Clark County	Lewis& Clark	Bridge	\$231,493	\$231,493	\$711,865
3	Beaverhead County	Beaverhead	Bridge	\$123,658	\$123,658	\$835,523
4	Granite County	Granite	Bridge	\$376,004	\$376,004	\$1,211,527
5	Carbon County	Carbon	Bridge	\$455,675	\$455,675	\$1,667,202
6	Ravalli County	Ravalli	Bridge	\$212,489	\$212,489	\$1,879,691
Totals				\$1,879,691	\$1,879,691	\$1,879,691

Project No. 1
Craig County Water & Sewer District – Wastewater System Improvements

This application received 4,108 points out of a possible 5,000 points and ranked 1 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$ 750,000	Awaiting decision of the Legislature
RRGL	Grant	\$ 100,000	Awaiting decision of the Legislature
RD	Grant	\$1,328,115	Application submitted May, 2012
RD	Loan	\$1,086,640	Application submitted May, 2012
Applicant	Cash	\$ 68,000	Committed by resolution
Project Total		\$3,332,755	

Median Household Income: \$23,280	Total Population: 103
Percent Non-TSEP Matching Funds: 77%	Number of Households: 55

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$	-	Target Rate:	\$17.46	-
Existing Wastewater Rate:	\$6.75		Rate With Proposed TSEP Assistance:	\$51.42	295%
Existing Combined Rate:	6.75	39%	Rate Without TSEP Assistance:	\$90.19	517%

Project History – Craig is an unincorporated community in Lewis and Clark County with 22 permanent residences, 33 seasonal homes, two fly shops, one bar, one restaurant, a community center, a fire station, and ten rental lodging or RV spaces. The area is an important angler destination, and businesses rely heavily on the seasonal fishing trade. Residences and businesses rely on individual wells and septic systems since no central water/wastewater infrastructure is available. Due to chronic problems with septic system performance and demonstrated degradation to groundwater, Craig residents petitioned the county to form a water and sewer district, which was certified in February 2009, after the statutory election and incorporation process.

Problem – The wastewater system consists of individual onsite septic systems and has the following deficiencies:

- ☐ most lots do not meet area and separation requirements for well and septic system siting, and have no available drainfield replacement areas;
- ☐ groundwater levels and many wells in the area are shallow, which increases their vulnerability to septic contamination;
- ☐ the County Health Department indicates that variances for drainfield replacements will not be granted in the absence of the required separations;
- ☐ nitrate levels in 15 of 28 recently tested wells were above ambient background concentrations indicating septic influence where nitrates are elevated and the risk of pathogenic bacterial or viral contamination; and
- ☐ two of the three currently active public water systems in Craig have, or have had, nitrate and/or coliform problems.

Proposed Solution – The proposed project would:

- ☐ construct a conventional gravity sewer system;
- ☐ construct a mechanical wastewater treatment package plant with membrane bioreactor technology as the preferred alternative; and
- ☐ provide for effluent discharge into a constructed wetlands.

Project No. 2
City of Glendive – Wastewater System Improvements

This application received 4,072 points out of a possible 5,000 points and ranked 2 out of 49 for funding in the 2015 Biennium. A reduced TSEP grant of \$625,000 is recommended instead of the amount requested, because the city's projected user rates will only be 127% of the combined target rate upon completion of the project as discussed.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
SRF	Loan	\$8,029,392	Application submitted May 2012
Project Total		\$8,879,392	

Median Household Income:	\$30,943	Total Population: 4,729
Percent Non-TSEP Matching Funds:	90%	Number of Households: 1,983

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$40.08		Target Rate:	\$59.31	-
Existing Wastewater Rate:	\$24.41		Rate With Proposed TSEP Assistance:	\$75.41	127%
Existing Combined Rate:	\$64.49	109%	Rate Without TSEP Assistance:	\$76.83	130%

Project History – The wastewater system for the City of Glendive was constructed in 1906 with the majority of the system installed prior to 1930. The City provides sewer service and treatment to the residents, businesses, and public facilities, including the Burlington Northern Santa Fe (BNSF) Railway, which is a significant industrial discharger to the Glendive wastewater system. The City and BNSF are drafting a pretreatment program per EPA guidelines to address potential future metals and organics toxicity problems. The City and surrounding planning areas comprise 53.6% of the population for Dawson Co. The City is experiencing growth and population effects from the Bakken oil boom. The PER notes that the growth could bring an additional 8,500 people to the City and its planning area.

The system consists of a collection system (clay tile, AC and PVC), five lift stations, and a three-cell facultative lagoon with discharge in the Fall and Spring to Glendive Creek under Montana Pollutant Discharge Elimination System (MPDES) discharge permit (MT0021628). The effluent is not disinfected. The City received a new discharge permit in 2007 that contained many new monitoring requirements, permit limits and a compliance schedule for system improvements. The permit will expire November 30, 2012.

Problem – According to the PER, the wastewater system has the following deficiencies:

- ❑ The treatment system has very little process control. When discharge conditions change, such as lagoon turnover, the City cannot consistently meet current permit limits for even secondary treatment standards.
- ❑ The City's existing treatment system has not consistently met secondary treatment standards. Secondary treatment standards, as required in the City's wastewater discharge permit, are the minimum treatment limits considered to protect designated uses of the receiving water. In this case, the receiving water can be considered both Glendive Creek and the Yellowstone River (approximately 2000 feet downstream from the point of discharge). The Yellowstone River at the entrance of Glendive Creek is classified as a B-3 water body.
- ❑ Currently, the wastewater being discharged to Glendive Creek is not disinfected. Permit limits for E. coli will be added to the discharge permit in the next cycle. New disinfection equipment will be required to meet this limit. This wastewater is being discharged to a creek with a low flow of nearly zero. This means that at times, the entirety of the stream is comprised of poorly treated wastewater that has not been disinfected.

The effluent stream travels approximately 2000 feet from the lagoon system to the Yellowstone River. This distance, and the fact that the Yellowstone River is a highly recreated river, creates a significant risk for human contact with the effluent.

- ❑ The City has had three 16" diameter raw wastewater forcemain breaks within the last two years. These breaks resulted in millions of gallons of raw wastewater being directly discharged to Glendive Creek and ultimately the Yellowstone River. As Glendive Creek continues to erode its banks, another forcemain break is eminent. The abandonment or replacement of this forcemain will eliminate this hazard to both recreationists and aquatic life.
- ❑ The system has failed whole effluent toxicity (WET) tests and given the lack of a mixing zone and dilution in Glendive Creek, future WET test failures are likely. These failures will likely result in a WET permit requirement in the next MPDES permit and therefore likely future violations of the MPDES permit. These WET test failures are most likely due to ammonia toxicity, but could be due to other toxic pollutants. The current wastewater treatment system probably does not have the ability to address the causes of WET failures.
- ❑ The Dawson County fairgrounds and community baseball fields are located 2,000 feet from the City's point of discharge and there is an existing trail from the fairgrounds/baseball fields to Glendive Creek. A recreationist being exposed to the poorly treated effluent discharged into Glendive Creek is possible.
- ❑ Glendive is located within the boundaries of the Bakken formation. The oil boom that is taking place in the Bakken has increased the area's population and put further stress on the City's existing wastewater treatment infrastructure.
- ❑ Dawson County owns and operates a wastewater collection and treatment system for the community of West Glendive. This system discharges to a side channel of the Yellowstone River under a MPDES permit. The County's treatment system is not meeting current discharge permit limits and will not meet pending future permit limits. The County and City have signed a Memorandum of Understanding (MOU) that its preferred treatment alternative is to connect to the City's system for wastewater treatment. All public health and safety concerns associated with the County's wastewater treatment system will be remedied by connecting the City's treatment system.

Proposed Solution – The proposed project would:

- ❑ Construct a mechanical wastewater treatment facility using Biological Nutrient Removal technology,
- ❑ Install UV disinfection, and
- ❑ Reclaim existing lagoons with sludge removal to City landfill.

Project No. 3
Town of Manhattan – Water System Improvements

This application received 4,063 points out of a possible 5,000 points and ranked 3 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Application submitted May 2012
WRDA	Grant	\$300,000	Town has a WRDA grant from 2010 that is available for this project.
SRF	Loan	\$505,000	Final loan amount dependent upon grant funding.
SRF 30%	Loan Forgiveness	\$200,000	Final loan forgiveness amount dependent upon grant funding and SRF loan amount.
Project Total		\$1,855,000	

Median Household Income:	\$38,242	Total Population: 1,520
Percent Non-TSEP Matching Funds:	59%	Number of Households: 576

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$34.47		Target Rate:	\$73.30	-
Existing Wastewater Rate:	\$72.11		Rate With Proposed TSEP Assistance:	\$111.01	151%
Existing Combined Rate:	\$106.58	145%	Rate Without TSEP Assistance:	\$118.60	162%

Project History – The water system for the Town of Manhattan (population 1,520) consists of an infiltration gallery (located about 3.5 miles south of Town), a booster station, a gas chlorination disinfection system for the infiltration gallery, two water supply wells, and a distribution system. There currently is no water storage facility. The Town uses residential and commercial service meters on about 620 service connections. The Town owns three other wells but does not currently have clear water rights yet.

Water from the infiltration gallery gravity-feeds from a caisson to the booster station south of town via a 12-inch PVC transmission main. The Town relies on the booster pump and well pumps to keep the system pressurized; two wells are used when system demands exceed the capacity of the spring supply. The Town applied for TSEP funding in 2010 to address the lack of system storage with a 500,000 gal storage tank, but was unsuccessful in grant acquisition.

In 2009 and 2010 system improvements were completed that include the installation of water meters, backflow prevention on all service connections, replacement of about 2,800 lineal feet (LF) of leaky transmission main, and installation of backup generators at two wells and at the booster station.

Problem – According to the PER, the water system has the following deficiencies:

- ☐ Inadequate fire flows,
- ☐ Low system pressures during peak demands and fire flow conditions,
- ☐ Lack of any storage capacity,
- ☐ Overall lack of fire protection
 - Unlikely that fire department (volunteer) could sufficiently control a fire at the school,
 - Firefighters at greater risk,

- Fires could spread to fuel tanks and other hazardous material storage facilities, e.g. anhydrous ammonia, etc., with resultant explosions and toxic emissions, and
- Lack of firefighting ability disallows adequate emergency response if explosion or toxic release were the result of a train derailment, or even a tornado or other catastrophe, such as the fires that occurred recently in Miles City and Bozeman.

Proposed Solution – The proposed project would:

- ❑ Construct new 300,000 gal glass lined bolted steel tank with telemetry and about 9,500 LF of 16-inch transmission main to connect to distribution system, and
- ❑ Replace booster station on the spring line to account for increased head on the system.

Project No. 4
Town of Cascade – Water System Improvements

This application received 3,950 points out of a possible 5,000 points and ranked 4 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted Spring 2013
SRF	Loan	\$550,051	Application expected to be submitted Spring 2013
SRF	Loan Forgiveness	\$219,000	Amount considered in tandem with the SRF Loan
Project Total		\$2,069,051	

Median Household Income:	\$30,602	Total Population:	819
Percent Non-TSEP Matching Funds:	63%	Number of Households:	323

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$53.47		Target Rate:	\$58.65	-
Existing Wastewater Rate:	\$46.59		Rate With Proposed TSEP Assistance:	\$103.23	176%
Existing Combined Rate:	\$100.06	171%	Rate Without TSEP Assistance:	\$118.82	203%

Project History - The original water system for the Town of Cascade was constructed in 1915. A series of six springs, located on the hillside northwest of town, have been developed as infiltration galleries to provide water for the Town of Cascade. Two wells completed in the Madison Formation also serve the water system. There are three separate chlorination facilities and three storage tanks (with a total of 489,000 gallons of storage) in addition to the distribution system. Pumps are used in the Madison wells only; the springs use gravity flow. The two partially buried concrete storage tanks (108,000 gallons) were built in 1911. The new 273,000 gallon steel tank was built in 2007/2008.

The 2012 PER references a 1999 water system analysis (PER) by Morrison-Maierle, a 2004 PER by Great West Engineering (GWE), and a 2008 PER by GWE. As a result of the previous engineering reports and funding efforts, the Town has experienced numerous upgrades within the last fourteen years including the addition of a new well, individual water meters, new storage tank, auxiliary power, telemetry controls and fire hydrant replacement. Phase 1 of the distribution system improvements was completed in 2006 when 2,700 feet of 8" steel pipe was replaced with 12" PVC. Phase II (proposed in 2008 TSEP application and completed in 2010) core distribution improvements replaced approximately 8,000 feet of pipe and installed a generator to provide auxiliary power to existing water well pumps.

Problem – According to the PER, the water system has the following deficiencies:

- ❑ Over a quarter of the existing water distribution system is comprised of deteriorated steel or cast iron water mains that are 97 years old and have outlived their useful life.
- ❑ Tuberculation forms iron and manganese deposits on the interior of old iron pipe and decreases water flow, limiting distribution and fire flow capacity.
- ❑ Old pipe is subject to electrolysis, which corrodes and forms holes in the pipe, creating a potential entry point for contaminants.
- ❑ Approximately 45 percent of the mains in the existing distribution system are four inch diameter. Fire hydrants installed on mains smaller than six inch in diameter are in violation of Circular DEQ 1 standard

8.2.2.

- ❑ Remaining original steel and cast iron distribution piping from the early 1900's was not designed to handle current day flows from a significantly increased population. This piping is 97 years old and has outlived its useful life.
- ❑ Low pressures, as seen in previous hydrant flow tests, increase the potential for backflow.
- ❑ Unaccounted for water averages 45 percent over the last ten years, which means that the Town's water sources are pumping a large amount of water that the Town never uses.
- ❑ Undetected leaks within the water system increase the potential for backflow and contamination of the public water supply from outside sources.
- ❑ Some water mains are not looped, which can result in stagnant water and create a public health risk. This also limits distribution capacity.
- ❑ The 2008 sanitary survey documented condensation leaking to the outside of the concrete storage tanks, indicating they are not well sealed.
- ❑ The south concrete storage tank has a corner with damaged concrete, which may provide an avenue for contaminants.
- ❑ The concrete storage tanks are 97 years old. They are both beyond their design life and their structural integrity is a concern.
- ❑ There is not adequate fencing or other security measures in place around the existing spring boxes.
- ❑ The two existing chlorine buildings are essentially storage sheds that are not structurally sound, do not meet the requirements for a building in a water system described in Circular DEQ 1, and are in need of replacement.

Proposed Solution – The proposed project would consist of distribution system improvements that will replace about 10,800 lineal feet and complete necessary looping in the system (about 900 lineal feet) to install new six inch and eight inch diameter PVC in place of leaking steel and cast iron pipes and undersized four inch diameter pipes throughout the system:

- Fifth St. West from First Ave. North to Second Ave. North
- First Ave. North from Fourth St. West to Fifth St. West
- Fourth St. West from Second Ave. North to Fourth Ave. North
- Third St. West from Second Ave. North to Fourth Ave. North
- Second St. West from Second Ave. North to Fourth Ave. North
- Alley east of Second St. West from Third Ave. North to Fourth Ave. North
- Fourth Ave. North from Fourth St. West to Alley
- Third St. West from Fourth Ave. South to Central Ave.
- Second St. West from Fourth Ave. South to Central Ave.
- Second Ave. South from Second St. West to First St. West
- Front St. from Third Ave. South to Second Ave. South
- Front St. from First Ave. South to Central Ave.
- Third Ave. North from Front Street to First St. West

Project No. 5
Pinesdale Water System Improvements

This application received 3,916 points out of a possible 5,000 points and ranked 5 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$ 750,000	Awaiting decision of the Legislature
RRGL	Grant	\$ 100,000	Awaiting decision of the Legislature
CDBG	Grant	\$ 450,000	Application expected to be submitted March 2013.
RD	Grant	\$ 372,582	Application submitted May 2012
RD	Loan	\$ 869,357	Application submitted May 2012
Project Total		\$2,541,939	

Median Household Income:	\$26,528	Total Population: 742
Percent Non-TSEP Matching Funds:	70%	Number of Households: 139

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$72.51		Target Rate:	\$50.85	-
Existing Wastewater Rate:	\$00.00		Rate With Proposed TSEP Assistance:	\$116.47	229%
Existing Combined Rate:	\$72.51	142%	Rate Without TSEP Assistance:	\$137.55	271%

Project History – The water system for Pinesdale (population 827) employs treated surface water and chlorinated ground water. The intake for the surface water originates in Sheafman Creek. Raw water flows from the intake to a manhole where flow is split between drinking water and irrigation uses. Drinking water treatment is accomplished using 20 micron direct filtration pressure multi-media sand filters without additional coagulants. One-micron absolute bag filtration follows the pressure filtration, with chlorination subsequent to all filtration.

Three wells serve the Town of Pinesdale. Well 1 is 383 ft deep with a capacity of 45 gpm, but the flow reportedly decreases to about 20 gpm after a few days of pumping. Wells 3 and 4 are 47 and 52 ft deep and provide a combined 20 gpm into a common header prior to chlorination and subsequent discharge to the distribution system. Captive air tanks control pump cycling for wells 3 and 4.

The distribution is supplied by a 500,000 gallon flow through tank. The treated water enters the tank, and is ultimately discharged to the distribution system and into the various pressure zones. Residents use individual septic tanks and drainfields for wastewater treatment and disposal.

Problem – According to the PER, the water system has the following deficiencies:

- Surface water treatment technique violations for turbidity have resulted in an Administrative Order from EPA,
- Quarterly sample results for disinfection byproducts (DBPs) are also above the MCL; DEQ is encouraging the Town to address the reduction of DBPs while they are in the process of addressing the EPA Administrative Order.

Proposed Solution – The proposed project would:

- Construct a new water treatment facility using sand filtration with coagulation; followed by granular activated carbon filtration for DBP removal.

Project No. 6
Musselshell Community – County Water & Sewer District - Water System Improvements

This application received 3,866 points out of a possible 5,000 points and ranked 6 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$ 450,125	Awaiting decision of the Legislature
Coal Board	Grant	\$ 150,000	Application expected to be submitted January 2013
RD	Grant	\$ 207,500	Application expected to be submitted in October 2012
RD	Loan	\$ 92,625	Application expected to be submitted in October 2012
Project Total		\$900,250	

Median Household Income:	\$23,750	Total Population:	60
Percent Non-TSEP Matching Funds:	50%	Number of Households:	28

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$30.73		Target Rate:	\$27.71	-
Existing Wastewater Rate:	\$		Rate With Proposed TSEP Assistance:	\$43.38	157%
Existing Combined Rate:	\$30.73	111%	Rate Without TSEP Assistance:	\$90.16	325%

Project History – Formed in January 2011, the Musselshell Community-County Water and Sewer District provides drinking water to the community of Musselshell located northeast of Roundup. The water system consists of two wells that supply 35 gpm each, a hydropneumatic tank, and a distribution system. There is no storage reservoir other than the single 1000 gal air/water interface pressure tank used for pressure control. Wastewater disposal is accomplished using individual septic tanks and drainfields.

Problem – According to the PER, the water system has the following deficiencies:

- ❑ Lack of sufficient water supply and lack of backup supply – the operator has observed static pressures of less than 20 psi on numerous occasions in the distribution system;
- ❑ Obsolete black plastic pipe;
- ❑ Bacterial growth in dead end mains;
- ❑ Pressure tank is actually a retrofitted propane tank that is corroded and presents a safety hazard to the operator who must manually adjust air pressure in the tank;
- ❑ Inadequate number of isolation valves on the distribution system – the entire community must go without water in order to effect regular maintenance or to isolate a portion of the system for a repair;
- ❑ Lack of insulation and heat in the wellhouse – leads to the risk of frozen pipes in the wellhouse which could leave the community without a water supply; and
- ❑ Undersized and unreliable emergency generator that operates only one well pump.

Proposed Solution – the proposed project would:

- ❑ Install a new well (potentially approx. 400 ft total depth) with small well house for controls and pressure tank;
- ❑ Replace all known black plastic pipe (about 1,995 feet) install several additional valves throughout the network and loop the northeast half of the network by running a new main across Main Street to connect to the west half of the distribution network.
- ❑ Approximately 36 new radio read meters installed in outdoor pits; and
- ❑ Wellhouse improvements to include insulate and finish the walls, add heating and ventilation, replace corroded hydropneumatic tank, and install new permanent generator.

Project No. 7
Town of Valier – Wastewater System Improvements

This application received 3,835 points out of a possible 5,000 points and ranked 7 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
RD	Grant	\$523,350	Application submitted April of 2012
RD	Loan	\$610,580	Application submitted April of 2012
Project Total		\$1,983,930	

Median Household Income:	\$30,000	Total Population: 498
Percent Non-TSEP Matching Funds:	62%	Number of Households: 220

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$40.00		Target Rate:	\$57.50	-
Existing Wastewater Rate:	\$37.00		Rate With Proposed TSEP Assistance:	\$86.24	150%
Existing Combined Rate:	\$77.00	134%	Rate Without TSEP Assistance:	\$98.15	171%

Project History – Valier (509 pop.) is located 75 miles north of Great Falls on the north shore of Lake Frances. The original Valier wastewater treatment facility was constructed in 1958 as a single-cell, unlined facultative lagoon with a controlled discharge. A new lagoon treatment facility was completed in 1999. The lagoons discharge continuously to an unnamed tributary about seven miles upstream of the confluence with Bullhead Creek, which discharges to Schultz Coulee, which in turn discharge to the Marias River, a total distance of 22 stream miles. The 1999 facility has a total design volume of 4.3 million gallons and consists of a three-cell, partially mixed aerated lagoon. In late 2008, an open-channel UV disinfection system was installed for inactivation of microorganisms. The system also consists of one lift station and about 35,000 feet of collection main. The current permit (March 1, 2010) authorizes the Town to discharge until February 28, 2015, when the permit expires.

Most of the collection system was installed between 1908 and 1910 was lined and was rehabilitated under a 2006/2007 construction project. However, there is still about 5,000 ft of deteriorated and/or undersized pipe.

Problem – According to the PER, the wastewater system has the following deficiencies:

- ❑ The Town is operating under an AOC that modifies portions of the permit and adds Corrective Action Requirements,
- ❑ There have been 39 permit violations for biochemical oxygen demand (BOD5) and total suspended solids (TSS) from January 2008 through December 2011, plus an additional violation in 2007.
- ❑ The collection system is undersized and lacks manholes. The collection system contains cracked and broken clay pipe and Orangeburg pipe that continues to compress, flatten, and delaminate, causing plugging.
- ❑ In December 2011 a plugged sewer main caused a back-up into a residence on the oldest clay pipe on Illinois Avenue between 7th and 9th Street. The homeowner filed a claim with the Town in February 2012, for which the resolution is pending, and
- ❑ Six sites identified are not currently serviced by the public collection system; five of these use a septic tank and drainfield which could ultimately contaminate groundwater.

Proposed Solution – The proposed project would:

- ❑ Treatment facility upgrades including replacement of aeration system, construction of a blower building, installation of baffle curtains and addition of a cover on the last half of Cell 3,
- ❑ Replace 5,000 LF of collection pipe and install 19 new manholes, and
- ❑ Extend service to 6 new users, including 4 grinder pumps and force mains.

Project No. 8
Hill County - North Havre – Wastewater System Improvements

This application received 3,797 points out of a possible 5,000 points and ranked 8 out of 49 for funding in the 2015 Biennium. A reduced TSEP grant of \$211,500 is recommended instead of the amount requested, because the applicant does not qualify for a hardship request.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$317,250	Awaiting decision of the Legislature
SRF	Loan	\$105,750	Application expected to be submitted June 2012
Project Total		\$423,000	

Median Household Income:	\$20,888	Total Population: 973
Percent Non-TSEP Matching Funds:	25%	Number of Households: 422

RSID #11	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$0.00		Target Rate:	\$15.67	-
Existing Wastewater Rate:	\$30.53		Rate With Proposed TSEP Assistance:	\$30.53	195%
Existing Combined Rate:	\$30.53	195%	Rate Without TSEP Assistance:	\$	%

RSID #21	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$0.00		Target Rate:	\$15.67	-
Existing Wastewater Rate:	\$31.83		Rate With Proposed TSEP Assistance:	\$36.66	234%
Existing Combined Rate:	\$31.83	203%	Rate Without TSEP Assistance:	\$45.35	289%

Project History –The community of North Havre is a part of Hill County and is located along the northern bank of the Milk River. The south side of the river is the City of Havre's northern boundary. Havre was first incorporated in 1893 as a major railroad service center for the Great Northern Railway and is the largest city on the Hi-Line.

North Havre contains two Rural Special Improvement Districts, RSID #11 and RSID # 21, that were created in 1956 and 1974, respectively. The water supply for each RSID is comprised of individual wells; there is no public water supply for the community. Each wastewater system consists of gravity collection, individual lift station, and raw sewage forcemains conveying wastewater underneath the Milk River and into the City's wastewater collection system. The wastewater then flows to the nearby wastewater treatment plant where it is treated and then discharged into the Milk River. Over time the river has slowly washed away the banks exposing the wastewater forcemains. The annual average total wastewater flow for both of the RSIDs is about 42,300 gpd.

Problem – According to the PER, the wastewater system has the following deficiencies:

- ❑ The exposed sewage forcemains pose a threat to public health and safety. They have become exposed by riverbank erosion on the Milk River and are susceptible to failure from floating debris or ice jamming.
- ❑ The RSID#11 lift station has an unsafe pump platform that causes unsafe conditions for the operator when servicing the lift station, and non-functioning alarms. The operational costs associated with this lift station are also unreasonably high.

Proposed Solution – The proposed project would:

- ❑ Abandon two existing wastewater forcemains and replace them with new pipes, using horizontal drilling techniques, and
- ❑ Rehabilitate the old RSID #11 lift station by replacing pumping equipment, piping, valving, and controls.

The existing wet well will be re-used to minimize cost and construction –related disturbances.

Project No. 9
Town of Hot Springs - Water System Improvements

This application received 3,754 points out of a possible 5,000 points and ranked 9 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$ 592,550	Awaiting decision of the Legislature
CDBG	Grant	\$ 450,000	Application expected to be submitted March 2013
SRF	Loan	\$ 142,550	Application expected to be submitted May 2013
Project Total		\$1,185,100	

Median Household Income:	\$12,663	Total Population: 531
Percent Non-TSEP Matching Funds:	50%	Number of Households: 280

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$24.26		Target Rate:	\$24.27	-
Existing Wastewater Rate:	\$21.48		Rate With Proposed TSEP Assistance:	\$49.02	202%
Existing Combined Rate:	\$45.74	188%	Rate Without TSEP Assistance:	\$58.98	243%

Project History – Three wells, ranging in depth from 250 to 800 ft in depth, currently serve the Town of Hot Springs, though wells # 2 and # 3 are used only for backup because they are not connected to a supervisory control and data acquisition (SCADA) system. Well #3 also exceeded the MCL 5.0 (pCi/L) levels for radium₂₂₈ in 2006.

Well #1 is occasionally a flowing artesian well. A 200,000 gallon storage tank is located on a hillside at the west end of town (Old Mill Road). There is no disinfection or treatment employed at Hot Springs. Replacement projects in 1987 or in 2003 resulted in the completed replacement of the distribution system with 6- through 12- inch PVC. The Town also operates a community, public wastewater collection and treatment system.

Problem – According to the PER, the water system has the following deficiencies:

- ❑ Lack of a SCADA system interconnecting the Town's three wells has led to problems with near de-watering of the storage tank in the past. In the event of a failure of Well #S 1 automatic startup, Wells 2 and 3 must be started manually.
- ❑ Controls at Well 1 are over 25 years old and occasionally malfunction, causing the pump not to start when the water level in the storage tank drops to the prescribed turn-on level. As a result, the water system's pressure has been known to drop to unacceptable levels.
- ❑ Inadequate fire protection at the Town's public school because the school's three fire hydrants are located on the opposite side of the roadway from the school property and buildings, creating a potential for access problems for emergency vehicles in the event of a fire, and increasing the distance that firefighters would be required to run their fire hoses and adding delays.
- ❑ Lack of adequate storage for fire protection. According to the PER, the Town's current storage tank provides adequate storage for existing domestic and commercial demands, but it is too small to provide for fire flows for the Town.

Proposed Solution – The proposed project would:

- ❑ New 200,000 gal. storage tank and transmission main north of town limits;
- ❑ Approximately 350 LF of 8-inch main extension for fire protection at the school;
- ❑ Install and connect SCADA for Wells #2 and #3, including a new central terminal unit.

Project No. 10
Custer County RID #1 - Wastewater-Sewer Replacement

This application received 3,734 points out of a possible 5,000 points and ranked 10 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Firmly Committed
RD	Grant	\$402,000	Firmly Committed
RD	Loan	\$288,000	Firmly Committed
Applicant	Cash	\$ 100,000	Fully Committed
Project Total		\$1,990,000	

Median Household Income:	\$32,938	Total Population: 250
Percent Non-TSEP Matching Funds:	62%	Number of Households: 90

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$62.16		Target Rate:	\$63.13	-
Existing Wastewater Rate:	\$36.38		Rate With Proposed TSEP Assistance:	\$123.09	195%
Existing Combined Rate:	\$98.54	156%	Rate Without TSEP Assistance:	\$157.81	250%

Project History – The wastewater system in the area was established in the early 1900s and the 110 year old sewer remains in service today. Over the years, laterals have been constructed from this line mostly by neighbors getting together and installing short runs of six-inch line. In 1953, the county commissioners formed a rural improvement district (RID) to provide some entity to oversee the sewer system. The RID never constructed any lines. A users list was developed and annual assessments were made. The project serves a residential area northeast of Miles City with about 100 residences and about 250 people. Wastewater from the system is currently, and will continue to be, conveyed to the Miles City wastewater treatment plant.

Problem – The wastewater system has the following deficiencies:

- ☐ deteriorated and undersized sanitary sewer lines,
- ☐ deteriorated manholes,
- ☐ inadequate slopes of sewer lines,
- ☐ backups and plugging of sewage,
- ☐ sewers installed with no easements,
- ☐ private sewers being used by multiple homes, and
- ☐ sewer manholes that are difficult to reach for maintenance because they are not in streets or alleys.

Proposed Solution – The proposed project would:

- ☐ install about 7,000 feet of gravity sewer main,
- ☐ install two lift stations,
- ☐ install about 900 feet of force main, and
- ☐ install about 30 manholes.

Project No. 11
City of Chinook – Water System Improvements Project

This application received 3,724 points out of a possible 5,000 points and ranked 11 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$ 750,000	Awaiting decision of the Legislature
RRGL	Grant	\$ 100,000	Awaiting decision of the Legislature
RD	Grant	\$ 644,220	Application submitted June 2012
RD	Loan	\$1,503,180	Application submitted June 2012
Applicant	Cash	\$ 1,500	Committed by Letter of Intent
Project Total		\$2,998,900	

Median Household Income:	\$25,461	Total Population:	1,386
Percent Non-TSEP Matching Funds:	75%	Number of Households:	657

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$27.90		Target Rate:	\$48.80	-
Existing Wastewater Rate:	\$38.74		Rate With Proposed TSEP Assistance:	\$77.64	159%
Existing Combined Rate:	\$66.64	137%	Rate Without TSEP Assistance:	\$80.51	165%

Project History – The source water for the City of Chinook (population= 1,203) is the Milk River. Water flows by gravity into a wet well where the water is subsequently lifted to the water treatment facility using low service pumps. The treatment plant is a conventional filtration facility using alum as a primary coagulant. Powdered activated carbon can be fed for taste and odor control and for the removal of total organic carbon (TOC). Polymeric (polyDADMAC) flocculants and filter aids are also added, then flocculation, sedimentation using tube settlers and filtration is provided using dual media filters. Filtered water is chlorinated. Backwash water is dechlorinated using sodium bisulfite prior to discharge into the backwash ponds. The plant is capable of removing about 40% of the raw TOC, which is a precursor to disinfection byproducts. In addition to the treatment plant, the City water system also consists of two elevated storage tanks (300,000 gals. and 100,000 gals.) and a distribution system that reportedly consists primarily of asbestos cement pipe.

Problem – According to the PER, the water system has the following deficiencies:

- ❑ Recent MCL violations of the Stage 1 Disinfection and Disinfection Byproducts Rule (Stage 1 DBPs).
- ❑ Motor Control Centers and most associated components and wiring for the electrical system at the treatment plant is at least 20 years old and prone to failure and the control system needs to be replaced and the electrical system needs to be upgraded.
- ❑ Lack of optimization of alum coagulation results in elevated filter TOC concentrations.
- ❑ Filter media is 13 years old and the underdrain is outdated resulting in inefficient backwashing,
- ❑ Inability to monitor and control backwash flow rate,
- ❑ Excessive chlorine contact time limiting operational flexibility and increasing risk of DBP formation in treatment plant,
- ❑ Leaking valve on backwash pump results in only one duty backwash pump,
- ❑ Flocculation basin paddle speed control not functioning,
- ❑ Backwash pond decant flow meter requires redesign for accurate readings,
- ❑ Intake weir radial gate requires rehabilitation or replacement for reliable operation,
- ❑ Intake sump requires assessment to minimize sediment accumulation,

- ❑ Intake air pipe too shallow and causes freezing problems in winter,
- ❑ The plant does not have backup power; a power outage, March 2012, resulted in the inability to produce water for 18 hours.
- ❑ Both of the plant's high service pumps are required to operate in order to meet summer production rates and this does not meet the firm capacity requirement per DEQ 1.
- ❑ The lack of sediment removal prior to raw water low service pumping causes undue wear on the pump impellers and wear rings resulting in a reduced life span for the pumps; they are replaced every two years.
- ❑ The package filtration system had upgrades in 1999 but all basins are showing signs of external corrosion and the interior of the basins are also in need of rehabilitation. The filter media should be evaluated and replaced because it is 13 years old and the operators have noticed significant media loss.

Proposed Solution – The proposed project would:

- ❑ add enhanced coagulation,
- ❑ ultraviolet disinfection system,
- ❑ chloramine system,
- ❑ upgrade electrical and plant control systems,
- ❑ package plant upgrades to include upgrade of the filtration system,
- ❑ modification of the chlorine contact basin, and
- ❑ upgrade the high service pumps.

If the project is funded, the following test results and report must be included as part of the plan and specification package to DEQ and Commerce.

1. Comprehensive jar testing for enhanced coagulation using actual plant conditions including but not limited to tube settler surface overflow rates, detention times, solids handling ability, current and expected coagulant, flocculant, and pH concentrations, and
2. Bench scale testing for nitrosamine (NDMA) formation potential using expected dosages/concentrations of chloramine (proposed), pH, polyDADMAC, and other expected flocculants, coagulants, and filter aids under expected distribution system conditions including detention times.

Project No. 12
City of Roundup - Water System Improvements

This application received 3,683 points out of a possible 5,000 points and ranked 12 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$500,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted March of 2013
Applicant	Cash	\$200,273	Committed by resolution April 23, 2012
Project Total		\$1,250,273	

Median Household Income:	\$23,144	Total Population: 1,931
Percent Non-TSEP Matching Funds:	60%	Number of Households: 833

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$24.60		Target Rate:	\$44.36	-
Existing Wastewater Rate:	\$21.39		Rate With Proposed TSEP Assistance:	\$46.27	104%
Existing Combined Rate:	\$45.99	104%	Rate Without TSEP Assistance:	\$	%

Project History – The original water distribution system for the City of Roundup was installed in 1908 and was comprised mostly of cast iron pipe. Over 45,000 (LF) of the original, 100-year old cast iron pipe still remains in use. The pipe has deteriorated over time and City personnel repair an average of 2 to 3 leaks each month. Improvements following the flood of 2011 include, improving the well house and well pumps, replacement of the transmission main and adding another transmission main across the river, and main replacements to bypass the clearwell and infiltration gallery.

The City is currently pursuing development of and connection to, the Musselshell-Judith Rural Water System (MJRWS) to ultimately replace its source.

The 2012 proposed solution was the same as the 2010 (2013 biennium) proposed solution for the City's TSEP application. This was subsequently funded by TSEP in the summer of 2012 after the submittal deadline for the 2012 TSEP applications.

The revised proposed solution shown below addresses 2,400 feet of the remainder of the Priority 1 distribution system improvements left over from the 2010 project and about 2,600 feet of Priority 2 distribution system improvements. The subsequent Priorities 2 and 3 were described in the 2012 PER.

Note: This is the second distribution system replacement project proposed to TSEP. The previous 2013 biennium project was funded. The PER recommends a phased approach to system-wide main replacement.

Problem – According to the PER, the water system has the following deficiencies:

- ❑ Deteriorated cast iron pipe allows 20% leakage;
- ❑ Over 36% of existing distribution system unable to deliver recommended fireflows of 1,000 gpm because of undersized mains and iron deposits and scaling;
- ❑ 35 of the gate valves are rusted in the "open," position, making isolating portion of the system difficult;
- ❑ Corrosion of the mains has led to high levels of iron, manganese, sulfur, and TDS in the drinking water. Elevated iron concentrations in the water, exceed the Secondary MCL; and
- ❑ Hydraulics of the system is limited by a 1-inch thick layer of oxidized iron and tubercles that has accumulated inside the mains, reducing the amount of water available for fire flow and domestic demands;

- ❑ Scaling from pipes necessitates special screens on firefighting equipment;
- ❑ The system's water meters are at the end of their useful life and need to be replaced.

Proposed Solution – The proposed project would:

- ❑ Replace approximately 5,000 feet of cast iron main with 8-inch PVC water main, including about 14 hydrants that are not included in previously-funded (TSEP or other funding sources) project Schedules or Priorities.

Project No. 13
Dawson County – West Glendive – Wastewater System Improvements

This application received 3,680 points out of a possible 5,000 points and ranked 13 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
SRF	Loan	\$2,197,631	Unknown
Project Total		\$3,047,631	

Median Household Income:	\$33,487	Total Population: 1,833
Percent Non-TSEP Matching Funds:	75%	Number of Households: 725

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$0.00		Target Rate:	\$25.12	-
Existing Wastewater Rate:	\$15.33		Rate With Proposed TSEP Assistance:	\$63.97	255%
Existing Combined Rate:	\$15.33	61%	Rate Without TSEP Assistance:	\$70.36	280%

Project History – The West Glendive wastewater treatment facility is owned and operated by Dawson County. The County provides sewer service to the residents and businesses in the unincorporated West Glendive, Highland Park and Forest Park Subdivisions, via a public wastewater collection and treatment system. The existing West Glendive wastewater system consists of a central collection system, three lift stations, and a two-cell facultative lagoon treatment system with discharge to a side channel of the Yellowstone River. Discharge occurs in May and November and is regulated under the Montana Pollutant Discharge Elimination System (MPDES), discharge permit number MT0021733. The original wastewater system was constructed in 1959 and included the original collection system and the first cell (9.9 acres) of the treatment lagoon.

Note: The County and the City signed an MOU on 3/6/12 that its preferred alternative is to connect to the City system thereby eliminating the discharge of poorly treated and non-compliant wastewater to a side channel of the Yellowstone River. The MOU describes an agreement whereby the two parties have determined to discontinue the use of their respective facultative lagoons and for the City to construct a WWTP and for the County to connect to the WWTP. They mutually agree to establish an Interlocal Agreement between the Parties.

The PER indicates that the City of Glendive is currently designing the project in anticipation of constructing the project in the summer of 2013. The MOU is applicable only in the case of the City constructing a new WWTP and that the connection will only take place once the construction of the new plant has been completed. The City has prepared a PER to evaluate a new WWTP and request funding from TSEP. The City's PER planning area includes West Glendive and this connection is considered in the City's PER to ensure capacity to handle the additional loads and flows.

Project schedules included in PERS for both Dawson County-West Glendive and the City of Glendive indicate the treatment plant will be constructed beginning the summer of 2013 and on-line in June 2014 with West Glendive's connection to the system in the fall 2014 (PER Table 10.2).

The Applicant's Engineer indicates that the City of Glendive is committed to proceeding with the proposed project even if grant funding is not awarded to the project by the Montana Legislature. In the unlikely case, that SRF loan funding is also not available for the project; the City will submit an application for Rural Development loan funds

Problem – According to the PER, the wastewater system has the following deficiencies:

- ❑ Lift Station #1 discharges to a manhole via a 12-inch force main, from which point effluent gravity flows through a 12-inch gravity main to Lift Station #2. The pumps in Lift Station #1 have a total pumping capacity of 1,200 gpm, which exceeds the full flow capacity (760 gpm) of the 12-inch gravity main. Services connected to the 12-inch gravity main may be connected below spring line and at inadequate slopes, which can result in surcharging of manholes and lift stations and ultimately human exposure to raw wastewater.
- ❑ During storm events or periods of high flow, raw wastewater either backups into homes and business, or the operator has to pump the raw wastewater from Lift Station #1 into an adjacent storm drainage ditch. This occurred for 19 hours on May 30, 2011. The ditch runs along a street in front of homes and businesses and ultimately discharges to the Yellowstone River.
- ❑ Flow monitoring was completed to verify the presence of infiltration and inflow (I&I) into the collection system. The results indicate I&I ranging from 120 gpm during the low groundwater periods to a high of 200 gpm during high groundwater periods.
- ❑ A side channel of the Yellowstone River is the current receiving stream for discharge of treated effluent. At certain times of the year, the seven day, ten year low flow (7Q10) is nearly zero, which reduces dilution. Consequently, it is anticipated that the County's next permit will include significantly more stringent ammonia toxicity and Whole Effluent Toxicity (WET) limits which will not be able to be met with the existing treatment system.
- ❑ The Total Suspended Solids (TSS) discharge permit limit was made more stringent in the last permit cycle. The county has had 26 exceedances of permit effluent numeric limits for TSS between 2007 and 2012, 17 of which are considered significant. The existing treatment system is not capable of meeting current TSS limits.
- ❑ The County's wastewater discharge permit includes secondary treatment standards to protect designated uses of the receiving water. The existing treatment system is not capable of meeting minimum treatment limits associated with the secondary treatment standards, which creates a public health hazard and results in the degradation of State waters.
- ❑ DEQ Enforcement Division informed Great West Engineering that Dawson County-West Glendive will be issued an Administrative Order on Consent (AOC) for their wastewater treatment facility. This AOC is a legal agreement between the County and the State in which the County agrees to take corrective action and pay associated penalties. The AOC is an acknowledgement that the County is violating the Water Quality Act.
- ❑ Permit limits for E. Coli will be included in the discharge permit in the next cycle. New disinfection equipment will be required to meet this limit.
- ❑ The County is in the midst of an oil boom due to the Bakken oil field located in North Dakota and eastern Montana. This boom has increased the area's population and put further stress on the County's existing wastewater infrastructure.

Proposed Solution – The proposed project would:

- ❑ Construct a new force main between Lift Station #1 and Lift Station #2, which will alleviate the issues associated with the pumping capacity in Lift Station #1 exceeding the flow capacity of the existing pipe and the resulting surcharge of raw wastewater. This part of the project will eliminate the most immediate public health and safety risk of human contact with raw wastewater and the potential for raw wastewater to reach the Yellowstone River.
- ❑ Connect Dawson County-West Glendive's collection system to the City of Glendive's wastewater treatment system, and thereby eliminate the treatment process in the existing system and all permit requirements. The connection includes:
 - crossing the Yellowstone River by attaching to the Towne Street Bridge,
 - Installation of a new lift station to pump wastewater across the river to the City's forcemain,
 - New forcemain to pump wastewater from Highland Park Subdivision to Lift Station #2, and
 - Sludge removal and site reclamation at the old lagoon site.

. Note: If funded, TSEP funding for the Dawson Co. – West Glendive connection to the Glendive wastewater treatment facility will be contingent on the construction of the City of Glendive wastewater treatment facility.

Project No. 14
Seeley Lake Water & Sewer District – Wastewater System Improvements

This application received 3,677 points out of a possible 5,000 points and ranked 14 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted March of 2013
STAG	Grant	\$1,521,700	\$721,700 committed, application expected to be submitted January of 2013 for balance
WRDA	Grant	\$680,000	Application expected to be submitted January of 2013
RD	Grant	\$1,300,000	Application expected to be submitted June of 2013
RD	Loan	\$2,105,300	Application expected to be submitted June of 2013
Project Total		\$6,907,000	

Median Household Income:	\$35,101	Total Population: 780
Percent Non-TSEP Matching Funds:	89%	Number of Households: 312

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$00.00		Target Rate:	\$25.91	-
Existing Wastewater Rate:	\$00.00		Rate With Proposed TSEP Assistance:	\$102.22	395%
Existing Combined Rate:	\$00.00	0%	Rate Without TSEP Assistance:	\$	%

Project History – Wastewater treatment and disposal in the unincorporated community of Seeley Lake in Missoula County consists of individual on-site wastewater treatment systems such as septic tanks with drainfields or seepage pits. The Seeley Lake Sewer District was formed in 1992 to address issues related to a high density of septic tanks and on-site wastewater treatment systems. Since the formation of the district, multiple studies have been completed to analyze the impact of on-site wastewater systems on groundwater in the area. In 1998 the Montana Bureau of Mines and Geology (MBMG) completed a groundwater study for the Seeley Lake Area and the District completed additional groundwater monitoring in 2003. The groundwater studies concluded that septic tank effluent is contributing to the degradation of groundwater.

Problem – The wastewater system consists of individual onsite septic systems and has the following deficiencies:

- ❑ nitrate and chloride data from multiple groundwater studies suggests groundwater is being degraded by septic tank effluent;
- ❑ groundwater monitoring wells completed by the district confirm the presence of elevated nitrates, total coliforms, and fecal coliforms in the groundwater down-gradient of the community;
- ❑ several studies on the quality of water in Seeley Lake have been completed that have demonstrated elevated levels of nutrients (phosphorous and nitrates) in the lake; the lake experiences algae blooms, occasionally with toxic blue-green algae;
- ❑ development within the Seeley Lake community utilizing on-site septic systems for existing vacant lots less than 1/2 acre will not be allowed and new or expanded commercial facilities will likely be required to install very large or advanced on-site treatment systems to satisfy state and county non-degradation regulations;
- ❑ current wastewater management within the District consists of standard septic tanks and drainfields on very small lots (73% less than 1/2 acre);
- ❑ a significant percentage of the permitted systems were installed without solid header pipes for uniform

- distribution to the drainfield laterals and many lots were developed with seepage pits rather than drainfields;
- ❑ county regulations limit septic discharge to 600 gallons per acre per day and many of the commercial lots in Seeley Lake do not have adequate acreage to meet this requirement; and
 - ❑ because of small lot size it has been difficult to locate replacement areas within the lots and substandard replacement systems in the form of seepage pits are still being allowed.

Proposed Solution – The proposed project would:

- ❑ install about 12,500 feet of gravity sewer mains and associated manholes;
- ❑ install about 2,500 feet of force main;
- ❑ install about 5,200 feet of service line to edge of right of way;
- ❑ construct a lift station; and
- ❑ construct a sequencing batch reactor treatment plant with disposal through a groundwater infiltration gallery.

Note: The proposed project is the first phase of a four-phase project that could ultimately provide centralized sewer service to every residential, commercial and institutional facility within the District. The project would also involve abandoning existing on-site septic tank/drainfield systems. Each phase is structured as a “stand-alone” project and is not dependent on subsequent phases.

Project No. 15
City of Three Forks - Wastewater System Improvements

This application received 3,652 points out of a possible 5,000 points and ranked 15 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
SRF	Loan	\$3,679,155	Application expected to be submitted June 2012
Project Total		\$4,529,155	

Median Household Income:	\$34,212	Total Population: 1,728
Percent Non-TSEP Matching Funds:	83%	Number of Households: 686

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$29.16	-	Target Rate:	\$65.57	-
Existing Wastewater Rate:	\$32.21	-	Rate With Proposed TSEP Assistance:	\$113.46	173%
Existing Combined Rate:	\$61.47	94%	Rate Without TSEP Assistance:	\$120.50	184%

Project History – The wastewater treatment lagoon in Three Forks was constructed in 1960. The lift station and treatment lagoons were upgraded in 1982. Two new facultative lagoons were constructed and the existing lagoon was converted into a storage lagoon and two infiltration/percolation (I/P) cells. Discharge from the facility is primarily to groundwater, but an under drain system located below the I/P cells collects some of the wastewater and directs it to the highly recreated Madison River.

A preliminary engineering report was prepared in 2006 that evaluated the condition of the collection system and the treatment facilities. Collection system improvements were completed in 2007, but treatment recommendations were not. The primary reason for not pursuing needed treatment system improvements was the uncertainty of the numeric nutrient standards, TMDL status and the implementation of nondegradation rules for nutrients.

The City of Three Forks was issued a new MPDES permit on January 1, 2009. This latest permit is much more stringent than the last permit. DEQ issued an Administrative Order on Consent in February of 2012, but it has not yet been signed.

Problem – The wastewater system has the following deficiencies:

- ☐ the city has had over 40 permit discharge violations since 2009;
- ☐ the existing treatment facility does not meet the minimum detention time allowed by DEQ for a facultative system;
- ☐ the storage cell leaks about 15 times the current leakage standard;
- ☐ the level control structure is no longer operational;
- ☐ the effluent discharge lift station at the treatment site is no longer operational;
- ☐ complaints have been received due to odor associated with the exposed discharge along the Madison River;
- ☐ groundwater is potentially being contaminated; and
- ☐ the facility cannot meet new *E. coli* limits.

Proposed Solution – The proposed project would:

- ☐ construct an advanced lagoon process that includes prescreening, a complete mix lagoon followed by two

- partial mix/settling lagoons; and
- ☐ provide UV disinfection prior to pumping effluent to the Madison River for discharge.

Project No. 16
City of Libby – Dam Replacement Project

This application received 3,644 points out of a possible 5,000 points and ranked 16 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted March of 2013
RD	Grant	\$3,204,000	Application submitted April of 2012
RD	Loan	\$3,916,000	Application submitted April of 2012
Applicant	Cash	\$377,000	Committed
Project Total		\$8,797,000	

Median Household Income:	\$24,276	Total Population: 2,626
Percent Non-TSEP Matching Funds:	91%	Number of Households: 1,132

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$40.02		Target Rate:	\$46.53	-
Existing Wastewater Rate:	\$34.35		Rate With Proposed TSEP Assistance:	\$82.07	176%
Existing Combined Rate:	\$74.37	160%	Rate Without TSEP Assistance:	\$83.49	179%

Project History – The water in Libby is supplied from Flower Creek, which flows out of the Cabinet Mountains, southwest of Libby. The Upper Flower Creek reservoir is primarily used for storage and is located about three and one half miles southwest of Libby. Upper Flower Creek Dam is a 58 foot high by 120 feet long concrete arch dam, constructed in 1945 for the power company. The reservoir has a normal capacity of 221 acre-feet. Libby purchased the water system from the power company in 1986. The water treatment plant in Libby was constructed in 1998 and consists of a water filtration plant. The water supply for the plant is entirely from Flower Creek.

Problem – The water system has the following deficiencies:

- ❑ the Upper Flower Creek Dam is no longer believed to have adequate strength to meet the required minimum safety factor for a concrete arch dam; and
- ❑ the strength of the concrete at the Upper Flower Creek Dam is likely to continue to deteriorate to a level that could result in failure of the dam in the future.

Proposed Solution – The proposed project would replace the Upper Flower Creek Dam.

Project No. 17
South Wind Water & Sewer District – Water & Wastewater System Improvements

This application received 3,597 points out of a possible 5,000 points and ranked 17 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
CDBG	Grant	\$450,000	Application expected to be submitted May of 2013
RD	Grant	\$300,000	Application expected to be submitted February of 2013
RD	Loan	\$374,500	Application expected to be submitted February of 2013
Project Total		\$1,974,500	

Median Household Income:	\$19,775	Total Population: 240
Percent Non-TSEP Matching Funds:	62%	Number of Households: 79

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$15		Target Rate:	\$37.90	-
Existing Wastewater Rate:	\$10		Rate With Proposed TSEP Assistance:	\$57.40	151%
Existing Combined Rate:	\$25	66%	Rate Without TSEP Assistance:	\$	%

Project History – The Southwind Water and Sewer District (formerly Trailer Terrace) is located about 1.7 miles south of the City of Great Falls and about ¼ mile east of the East Bank of the Missouri River. The area is not annexed to the City; it is a mobile home park with urban densities. The District is licensed for 92 mobile homes; about 80 of which are occupied. The community encompasses about 22 acres. The mobile home court and infrastructure was constructed in two phases in 1962 to house temporary construction workers; the north half was built in 1962 for Boeing and Co. who was building the Minuteman Missile Complex.

The North Phase of the wastewater system consists of 8-inch concrete sewer collection pipe and a 3-cell lagoon. The South Phase of the wastewater system service laterals appear to be constructed at least partially of Orangeburg pipe. A small submersible lift station adjacent to the fenced lagoon pumps raw wastewater to a primary cell with a total depth of about 7 ft. (541,000 gal. capacity). Two additional cells complete the 3-cell system. According to the PER, the total treatment operating volume is only 45% of that required by DEQ 2, has no formal outlet, no discharge permit, and is unlined and designed for infiltration to ground water.

The public water system is currently operated by the court owner and was built in the 1950s or 1960s. The source consists of two wells. The North well at 100 ft. total depth is completed openhole into the Kootenai Formation and is pumped at 20 gpm capacity. The South well was completed in “brown limestone,” at 270 ft. in depth and produces about 60 gpm. This well is the primary water source and contains arsenic at a level that violates the MCL. Disinfection is not provided for the drinking water system. The distribution system consists of about 3,200 LF of 2-inch polyethylene (PE) pipe. Various undocumented improvements have been made; no record of the original construction or replacement exists. The water storage tank is a used oil field tank. Two additional wells are not used and are currently “valved off,” from the system.

The residents of the trailer court organized into a Cooperative Corporation and have assembled sufficient financing to purchase the trailer court. According to the PER indications were that the current owner may sign a Buy-Sell

agreement, allowing the purchase of the property by the Cooperative Corporation.

Problem – According to the PER, the water and wastewater system has the following deficiencies:

- ❑ Wastewater treatment system is in violation of the Montana Water Quality Act for degrading ground water because of elevated levels of nitrates and ammonia (DEQ, 2002, 2004, 2006, and 2012),
- ❑ Floats in lift station malfunction, causing raw wastewater to back up into collection system, resulting in exfiltration of the raw wastewater from the collection mains,
- ❑ Lagoon volume is 45% of that required by current design standards,
- ❑ The lagoon is unlined and no formal discharge point exists; the system has no discharge permit,
- ❑ Drinking water arsenic MCL based on RAA – DEQ violation letter 1/24/2012 with and Administrative Order soon to be sent to the current owner,
- ❑ Poor water quality with respect to Secondary MCLs; high sulfate, iron, and TDS concentrations cause service line plugging, fixture staining, and objectionable taste and odor,
- ❑ Undersized water services and water mains, resulting in substandard pressure, and
- ❑ Utilization of substandard pipe materials.

Proposed Solution – The proposed project would:

- ❑ Drill a new well into the Madison Formation (\$132,900 construction cost; \$184,089 project),
- ❑ Assume arsenic MCL problem persists in the new well and budget for central water treatment plant (\$329,000 construction cost; \$430,990 project),
- ❑ If water treatment is not required, convert \$420,900 to most pressing distribution needs treatment funds to most pressing water distribution needs to resolve low pressure problems including,
 - construction of about 3,700 feet of 4-inch and 6-inch PVC main,
 - new 30,000 gal. storage tank (\$45,000 construction cost; \$58,950 project) at the well site,
 - develop as-built drawings of distribution system,
 - replace service lines and install about 12 meter pits on main replacement routes,
- ❑ Facultative lagoon with spray irrigation (\$979,000 construction cost; \$1,282,490 project).
- ❑ Rehabilitate lift station (\$20,000 construction cost),
- ❑ If negotiations with landowner of proposed treatment and irrigation site fail, pursue SBR plant with discharge to groundwater (\$734,100 construction cost; \$961,671 project) and use remaining capital as follows:
 - develop as-builts of collection system (\$6,000 construction cost),
 - install manholes as needed (\$3,000 construction cost),
 - and clean and televise the system (\$6,750 construction cost).
- ❑ Based on results of cleaning and televising the collection system, set rehabilitation priorities for both the collection and distribution system.

Note: The proposed solution is based on:

- ❑ Success in negotiating the purchase of the Community from the current owner,
- ❑ Negotiating land acquisition for wastewater treatment and disposal (currently in discussion), and
- ❑ Negotiating a location for a new water supply well, storage tank, and water treatment plant if required. Preliminary discussions have taken place with the landowner.

The construction process will include two parts: the first to construct the well, test for arsenic and build the wastewater treatment facility, and the second to install arsenic removal if necessary or install a portion of the most needed water distribution system improvements and provide enough wastewater collection system work to make it possible to maintain the wastewater system.

Note: The highest public health and safety priority is associated with the arsenic violation in the water source and high priority water distribution needs to address low residual pressures. If funded, the TSEP funds will be expended on the new well and subsequent treatment facility if it is necessary and the and highest priority distribution system needs first, then if any funds remain, the wastewater treatment/collection system.

Project No. 18
Richland County-Savage 2M Board – Wastewater System Improvements

This application received 3,523 points out of a possible 5,000 points and ranked 18 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
MT Coal Board	Grant	\$100,000	Application expected to be submitted in 2013
RD	Grant	\$364,500	Application expected to be submitted August, 2012
RD	Loan	\$850,500	Application expected to be submitted August, 2012
Project Total		\$2,165,000	

Median Household Income:	\$29,792	Total Population:	297
Percent Non-TSEP Matching Funds:	65%	Number of Households:	125

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$00.00		Target Rate:	\$22.34	-
Existing Wastewater Rate:	\$5.83		Rate With Proposed TSEP Assistance:	\$38.00	170%
Existing Combined Rate:	\$5.83	26%	Rate Without TSEP Assistance:	\$57.48	257%

Project History – Savage (estimated pop. 296) is a small unincorporated community located between Sidney (20 miles SE) and Glendive. Their wastewater system, constructed in 1967, consists of about 14,000 LF of vitrified clay pipe, PVC, and cast iron pipe. Treatment is accomplished by way of a single-cell facultative lagoon, equipped with a clay liner that discharges once per year to an irrigation overflow ditch that subsequently flows to the Yellowstone River.

The system has been meeting its discharge permit effluent concentration limits for BOD and TSS, but exceeding the limits for loading because of the high volume of wastewater that must be discharged in the spring to make room for another year of storage in the lagoon. The PER estimates that the maximum volume that could be discharged in order to meet the loading limits is only about 19,450 gallons, but the actual volume discharged is about 886,348 gallons.

Richland County manages the system and the Richland Co. sanitarian conducts the operation and maintenance (OM) services.

Problem – According to the PER, the wastewater system has the following deficiencies:

- ❑ Collection system is deteriorated with root intrusions, sand, silt, clay and gravel build-ups in the system,
- ❑ Administrative Order on Consent (AOC) issued on January 20, 2012 because of numerous discharge-permit violations because of the lagoon's inability to adequately treat wastewater to the existing discharge permit. From May 2007 through June 2011, Savage exceeded the discharge permit limits 22 times for BOD and TSS Loading Limits. The current permit does not contain effluent limits for E.coli,
- ❑ The lagoon is leaking excessively to area groundwater and to the adjacent irrigation overflow ditch. The overflow ditch is adjacent to the Elk Island Fishing Access and Wildlife Management Area and subsequently discharges to the Yellowstone River at the boat ramp for the fishing access, and
- ❑ The lagoon is out of compliance with current design criteria in DEQ Circular 2.
- ❑ The system has experienced increased demands because of growth from the oil and gas industry.

Proposed Solution – The proposed project would:

- ❑ Implement video inspection of the collection system, and
- ❑ Construct a facultative lagoon system with land application.

Project No. 19
Amsterdam Churchill County Sewer District No. 37 - Wastewater System Improvements

This application received 3,509 points out of a possible 5,000 points and ranked 19 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Received in 2011 session pending contract signed by 6/2013
RD	Loan	\$2,310,368	Application submitted in 2011
Project Total		\$3,160,368	

Median Household Income:	\$40,139	Total Population: 727
Percent Non-TSEP Matching Funds:	76%	Number of Households: 255

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$	-	Target Rate:	\$30.10	-
Existing Wastewater Rate:	\$31.00	-	Rate With Proposed TSEP Assistance:	\$62.37	207%
Existing Combined Rate:	\$31.00	103%	Rate Without TSEP Assistance:	\$72.74	242%

Project History – The unincorporated community of Amsterdam-Churchill located six miles south of Manhattan, formed a sewer district in 1977, and installed a community wastewater treatment and collection system. The treatment system consists of a two-cell facultative lagoon, and a single-cell storage lagoon, with land application. The system was intended to utilize land application as its primary means of disposal, but it has never been used and the storage lagoon has seen minimal effluent. One of the two cells is synthetically lined and the other is clay lined, and one or both are leaking and discharging partially treated effluent into the ground. A sanitary survey of the facility conducted by Montana Department of Environmental Quality (DEQ) in 2005 resulted in an administrative order of consent issued in July 2009. In January of 2012, the District was granted a two year extension of the administrative order, which now requires the District to complete construction of an approved facility no later than December 31, 2014.

Problem – The wastewater system has the following deficiencies:

- ☐ existing lagoons are leaking nearly all wastewater inflow into the groundwater;
- ☐ due to leakage, the system has never operated the intended land application effluent disposal;
- ☐ lagoons are undersized to receive current wastewater flows; and
- ☐ one of lift stations does not have backup power.

Proposed Solution – The proposed project would:

- ☐ abandon the existing treatment facility and construct a lift station and pipeline to convey wastewater to the City of Manhattan wastewater system for treatment and disposal; and
- ☐ provide backup power to lift station #2.

Note: The selected 'apparent best' alternative may change depending on continued negotiations between the District and the town. If the two entities cannot come up with a suitable agreement, the District will use the TSEP grant to construct a phased, partially mixed aerated lagoon with UV disinfection and land application of effluent.

Project No. 20
Town of Philipsburg - Water System Improvements

This application received 3,479 points out of a possible 5,000 points and ranked 20 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$550,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
RD	Grant	\$112,500	Application expected to be submitted May 2012
RD	Loan	\$357,500	Application expected to be submitted May 2012
Project Total		\$1,120,000	

Median Household Income:	\$24,559	Total Population: 914
Percent Non-TSEP Matching Funds:	51%	Number of Households: 408

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$31.36	-	Target Rate:	\$47.07	-
Existing Wastewater Rate:	\$37.50	-	Rate With Proposed TSEP Assistance:	\$76.41	162%
Existing Combined Rate:	\$68.86	146%	Rate Without TSEP Assistance:	\$81.22	173%

Project History – The water system in Philipsburg utilizes Fred Burr Lake and Montana Silver Springs as its only two water supply sources. Fred Burr provides approximately 82% of the town's annual water supply, with the remaining 18% coming from Montana Silver Springs. The Fred Burr supply is an unfiltered surface water source and Montana Silver Springs is a groundwater spring. Since 1992, Philipsburg has been granted a filtration waiver from the EPA for its Fred Burr surface water source. The most recent watershed inspection in 2011 completed by MDEQ indicates that the system continues to meet the current criteria for filtration avoidance. The January 2006 Long Term 2 Enhanced Surface Water Treatment Rule (LT2) requires that all unfiltered systems serving fewer than 10,000 people install a second form of disinfection no later than September 30, 2014 in order to comply with LT2 and to continue to maintain the filtration waiver. The distribution system consists of 62,000 feet of two to ten inch diameter pipe. Because of the fairly significant elevation differences across town, the distribution system is split into three pressure zones and pressures are controlled by pressure reducing valves. Storage consists of two, 200,000 gallon storage tanks.

Problem – The water system has the following deficiencies:

- ❑ a second form of disinfection is required by the Long Term 2 Enhanced Surface Water Treatment Rule in order to maintain the filtration avoidance criteria for the Fred Burr source; and
- ❑ the existing pressure reducing valves are nearing the end of their useful life and the valves have occasionally malfunctioned in recent years leading to excessive pressures in some areas of the distribution system; and

Proposed Solution – The proposed project would:

- ❑ construct a new UV disinfection system to allow the town to maintain its filtration waiver and avoid the construction of a costly water filtration plant; and
- ❑ replace all four pressure reducing valve stations in the distribution system including replacement of the valves and buried vaults at all four locations, replacement of an above-ground building at one of the stations, and installation of new pressure gauges, transmitters and remote telemetry units at each station.

Project No. 21
Town of Dutton – Water System Improvements

This application received 3,426 points out of a possible 5,000 points and ranked 21 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$408,500	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
SRF	Grant	\$ 92,500	Application submitted in 2012
SRF	Loan	\$231,555	Application submitted in 2012
Project Total		\$832,555	

Median Household Income:	\$34,063	Total Population: 389
Percent Non-TSEP Matching Funds:	51%	Number of Households: 158

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$29.95	-	Target Rate:	\$65.29	-
Existing Wastewater Rate:	\$41.00	-	Rate With Proposed TSEP Assistance:	\$79.22	121%
Existing Combined Rate:	\$70.95	109%	Rate Without TSEP Assistance:	\$95.04	146%

Project History – The Town of Dutton drinking water system is supplied by a 33-ft deep caisson well located northeast of Town near the Teton River. Water is treated for iron and manganese with polyphosphate and then disinfected with sodium hypochlorite prior to being pumped to the distribution system using a PVC and asbestos cement (AC) transmission main that is about 28,800 feet long. Originally constructed in 1935 of wood stave pipe, the distribution system currently consists of 31,040 LF of PVC and AC pipe that ranges in size from four to ten inches in diameter. Each water service is metered. A 500,000 gallon bolted steel water storage tank, new in 1992, is located south of Town and is connected to the distribution system with a ten-inch PVC transmission main. An older 120,000 gallon storage tank located in Town is currently disconnected from the distribution system. The annual average for unaccounted-for water is 43%.

Northcentral Montana Regional Water Authority (NCMRWA) has signed an agreement with the Town of Dutton and is moving forward with plans, to construct a transmission main (Segment W4-A) from the City of Conrad to the Town of Dutton, via Brady, to provide drinking water from Conrad. Construction to Brady is currently planned for 2013. The timeframe for construction to Dutton is unknown.

Problem – According to the PER, the water system has the following deficiencies:

- ❑ Most of the water valves are not operable; they are 35 years old and are in poor condition. The entire system must be drained in order to make a repair by closing a valve on the storage transmission main and turning off the well pumps. This increases the risk of backflow,
- ❑ Two inoperable fire hydrants near the Dutton school,
- ❑ All firefighting capabilities are eliminated during a repair because the entire system must be drained and isolated from supply and storage,
- ❑ The Town's 500,000 gallon storage tank has been in use for 20 years and is currently leaking,
- ❑ Tank inspection verified staining and corrosion on the interior. The tank has never been recoated,
- ❑ Ductile iron piping in the chlorination vault is badly corroded. There is no bypass around the chlorine vault and a pipe failure in the chlorine vault would cut off water supply to the Town, and
- ❑ The computer and software that control the Town's telemetry system are 20 years old and out of date. Because the computer at Town Hall controls the pumps and the storage tank, if a problem were to arise with the computer or the software, the operator would be forced to manually operate the pumps while monitoring the level in the tank that is miles away.

Proposed Solution – The proposed project would:

- ❑ Recoat 500,000 gal. tank with epoxy coating,
- ❑ Distribution system upgrades with minimum 26 new water valves and about two hydrants,
- ❑ Replace chlorine piping with HDPE pipe,
- ❑ Replace existing telemetry computer, and
- ❑ Install 4,300 LF of 8-inch PVC transmission main from the well source to the distribution system.

Note: If the source is replaced through a new transmission main constructed by the NCMRWA from the City of Conrad, the proposed 4,300 LF of 8-inch PVC transmission main from the well source to the distribution system will be omitted from the contract scope of work.

Project No. 22
City of Fort Benton – Wastewater System Improvements

This application received 3,369 points out of a possible 5,000 points and ranked 22 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
RD	Grant	\$2,366,000	Application expected to be submitted May 2012
RD	Loan	\$1,014,000	Application expected to be submitted May 2012
Project Total		\$4,230,000	

Median Household Income:	\$29,406	Total Population: 1,594
Percent Non-TSEP Matching Funds:	82%	Number of Households: 636

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$44.81	-	Target Rate:	\$56.36	-
Existing Wastewater Rate:	\$24.96	-	Rate With Proposed TSEP Assistance:	\$87.81	156%
Existing Combined Rate:	\$69.77	124%	Rate Without TSEP Assistance:	\$90.72	161%

Project History –The City of Fort Benton is an incorporated community located in Chouteau County. The City provides both public water and public wastewater services to its residences. The original wastewater system was constructed in 1960 and the treatment facility and lift station were upgraded in 1991. The City's system consists of a central collection system, one lift station, and a three-cell aerated lagoon system with discharge either to an infiltration pond (groundwater discharge) or to the Missouri River. Effluent discharge is continuous and the facility does not disinfect effluent wastewater. Discharge to the Missouri River has only occurred once since 2001, according to the DEQ Inspection Report. The City received a new discharge permit in 2007 which contained many new monitoring requirements, permit limits and a compliance schedule for system improvements. Their permit expired March 31, 2012.

Problem – According to the PER, the wastewater system has the following deficiencies:

- ❑ The City has experienced breaks in the 50+ years of 10-inch diameter steel raw wastewater forcemain.
- ❑ The City has experienced BOD5 discharge permit violations and cannot consistently meet this permit limit with their existing treatment system.
- ❑ The total suspended solids permit limit was made more stringent in the last permit cycle and the city cannot consistently meet this permit limit with their existing treatment system and has had numerous permit violations.
- ❑ Permit limits for E.coli have been added to the most recent discharge permit. New disinfection equipment will be required to meet this limit.
- ❑ The City was issued an Administrative Order on Consent (AOC) in August 2010 that includes a compliance plan for upgrades to their system. The DEQ noted that the permit effluent limits were exceeded 34 times between April 2007 and September 2009, with 12 of the violations being considered significant noncompliance; or the limits were exceeded by $\geq 40\%$.
- ❑ Secondary treatment standards, as required in the City's discharge permit, are the minimum treatment limits considered to protect designated uses of the Missouri River. The treatment system has not consistently met secondary treatment standards.
- ❑ The PER demonstrates that there is reasonable potential to violate future numerous nutrient standards for nitrogen, phosphorous and related TMDL load allocations. A variance is allowed for these standards, but it sunsets in 2016 and is subject to review every 3 years.

Proposed Solution – The proposed project would:

- ❑ Replace the aeration system in the first two lagoons,
- ❑ Construct a new on-site storage lagoon and an irrigation system,
- ❑ Lift station improvements including controls and a backup generator, and
- ❑ Replace approximately 4,200 LF of forcemain from the lift station to the lagoon.

Project No. 23
Town of Moore - Wastewater System Improvements

This application received 3,335 points out of a possible 5,000 points and ranked 23 out of 49 for funding in the 2015 Biennium. A reduced TSEP grant of \$625,000 is recommended instead of the amount requested, because the town's projected user rates will only be 145% of the combined target rate upon completion of the project.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$ 750,000	Awaiting decision of the Legislature
RRGL	Grant	\$ 100,000	Awaiting decision of the Legislature
RD	Grant	\$ 512,500	Application expected to be submitted in Sept 2012
RD	Loan	\$ 512,500	Application expected to be submitted in Sept 2012
Applicant	Cash	\$ 5,000	Committed by resolution
Project Total		\$1,880,000	

Median Household Income:	\$25,536	Total Population: 186
Percent Non-TSEP Matching Funds:	60%	Number of Households: 83

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$41.30	-	Target Rate:	\$48.94	-
Existing Wastewater Rate:	\$13.00	-	Rate With Proposed TSEP Assistance:	\$62.22	127%
Existing Combined Rate:	\$54.30	111%	Rate Without TSEP Assistance:	\$82.74	169%

Project History – The wastewater system for the Town of Moore consists of a two cell facultative lagoon system with disposal through irrigation. The lagoons are located about ½-mile northeast of town. Both the lagoon system and irrigation system were constructed in 1983. The collection system is gravity operated and contained almost 15,800 LF of pipe and 45 manholes. Prior to 1983 the residents of Moore used individual septic tanks drainfields. No major improvements have been made to the system since 1983.

The Town also operates a community public water system for the residents using three wells. The two older (1911) wells are used as backup wells. Well 3, drilled in 1992 at a depth of 1,820 ft. yields approximately 200 gpm.

Problem – According to the PER, the wastewater system has the following deficiencies:

- ❑ The lagoon liner has torn because of faulty installation on rocky subgrade, and raw and partially treated wastewater has been leaking directly into surrounding soil and groundwater.
- ❑ Based on measured flow data, the lagoons are losing over 78% of the influent per year through the torn liners, or 7.1 MG greater than the allowable annual leakage in DEQ 2 , or six-inches per year (equates to about 420,535 gallons per year).

Proposed Solution – The proposed project would:

- ❑ Rehabilitate the existing lagoons,
- ❑ Build a third lagoon cell to meet DEQ regulations for storage, and
- ❑ Install a new center pivot irrigation system and pump.

Project No. 24
City of Forsyth – Wastewater System Improvements

This application received 3,332 points out of a possible 5,000 points and ranked 24 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$500,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
Coal Board	Grant	\$250,000	Funds Secured
SRF	Loan	\$2,199,700	Application will be submitted February 2013
City	Cash	\$385,000	Committed
Project Total		\$3,434,700	

Median Household Income:	\$33,533	Total Population:	1,944
Percent Non-TSEP Matching Funds:	85%	Number of Households:	826

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$33.35		Target Rate:	\$64.27	-
Existing Wastewater Rate:	\$27.59		Rate With Proposed TSEP Assistance:	\$75.43	117%
Existing Combined Rate:	\$60.94	94.8%	Rate Without TSEP Assistance:	\$79.33	123%

Project History – The wastewater system in Forsyth operates a wastewater collection system that was originally installed in 1907 using vitrified clay tile pipe and brick manholes. About 20% of the collection system was replaced in 1984 and another 35% was replaced in 2000. The system has a history of excess flows from infiltration and inflow. Many of the old sewer lines were installed nearly flat or with minimum grade. This has resulted in solids settling out in the pipelines. Many of the lines are in a deteriorated condition. Backups into basements have been a frequent occurrence. The City of Forsyth operates a wastewater treatment system that includes an extended aeration oxidation ditch. Treated effluent disposal is into the Yellowstone River.

Problem – The wastewater system has the following deficiencies:

- ☐ high infiltration and inflow rates that overwhelm the treatment plant resulting in the plant being bypassed,
- ☐ portions of the sewer system have severe structural problems with some collapsed segments, and
- ☐ inadequate slopes for many of the sewer lines resulting in plugging and back-ups into homes, and requiring excessive cleaning.

Proposed Solution – The proposed project would:

- ☐ replace about 8,000 feet of sanitary sewer, and
- ☐ remove two storm sewer inlets that are connected to the sanitary sewer system.

Project No. 25
Vaughn County Water & Sewer District – Wastewater System Improvements

This application received 3,314 points out of a possible 5,000 points and ranked 25 out of 49 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$750,000	Awaiting decision of the Legislature
RRGL	Grant	\$100,000	Awaiting decision of the Legislature
SRF	Loan	\$1,122,645	Application expected to be submitted January 2013
Project Total		\$1,972,645	

Median Household Income:	\$31,250	Total Population: 701
Percent Non-TSEP Matching Funds:	62%	Number of Households: 264

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$39.85	-	Target Rate:	\$59.90	-
Existing Wastewater Rate:	\$34.00	-	Rate With Proposed TSEP Assistance:	\$107.45	179%
Existing Combined Rate:	\$73.85	123%	Rate Without TSEP Assistance:	\$132.42	221%

Project History – The Vaughn County Water and Sewer District wastewater system currently has 259 year round service connections. The current treatment facility, a three-cell aerated lagoon system, was constructed in 1997. Recent alterations, including aeration modifications, were performed in 2006 and 2007.

The collection system consists of main piping ranging from 6- to 12-inch in diameter, with materials of vitrified clay or PVC. The system includes an influent lift station and an effluent lift station. The influent lift station was installed as part of the 1973 construction of the original treatment cells. The effluent lift station was constructed in 1997. Two 4-inch forcemains connect to a 6-inch forcemain that transports treated effluent to the Sun River for ultimate disposal. The forcemain is 2,270 feet in length and runs underneath the old Sun River channel (slough) and over the flood dike. The discharge structure consists of sheet piling, wingwalls and rip-rap. According to the PER, a chlorinator is onsite but chlorination of the effluent is only available with additional improvements.

Problem – According to the PER, the wastewater system has the following deficiencies:

- ❑ Treatment facility is incapable of meeting final effluent discharge limits specific to total nitrogen, total phosphorous and E.coli.
- ❑ Treatment system is under an Administrative Order on Consent (AOC) (issued on July 2, 2010 for discharge permit violations of BOD, TSS and pH and reporting violations) and violated the discharge permit over 23 times that are considered significant non compliances.
- ❑ The influent lift station is over 38-years old, beyond its useful life and is in dilapidated condition. The automatic transfer switch is unreliable and in poor working condition, and the backup power generator is undersized for the recently installed new lift station pumps. The lift station lacks a direct flow measuring device.
- ❑ Collection system is 38 years or older and over one-half of it lies below groundwater level and allows groundwater infiltration and inflow (I&I).

Proposed Solution – The proposed project would:

- ❑ Replace the existing influent lift station, including new auto transfer switch, and new generator.
- ❑ Treatment system improvements to spray irrigate effluent between May 1-September 30 and discharge to the Sun River remaining part of year. Components will include:
 - Repair of the existing aerator controls,
 - Replacement of a domestic well because the proposed new aeration cells encroaches within 500

- feet of an existing domestic well,
- New aeration cell,
- Spray irrigation system, and
- UV disinfection system.

Bridge List

Project No. 1 Missoula County - Bridge System Improvements

This application received 4,041 points out of a possible 5,000 points and ranked 1 out of 17 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$480,372	Awaiting decision of the Legislature
Applicant	Cash	\$480,373	Committed by resolution, partially expended on PER
Project Total		\$960,745	

Median Household Income:	\$34,454	Total Population: 95,802
Percent Non-TSEP Matching Funds:	50%	Number of Households: 38,439

Project History - Missoula County has selected one bridge for replacement. Riverview Drive Bridge is located at the outlet of Seeley Lake and crosses over the Clearwater River. The existing five-span steel girder bridge is 100 feet long and was constructed in 1967. It serves about 405 vehicles per day including about 50 full time residents and recreational users. The existing structure also serves a school bus route and the structure includes a bike and pedestrian lane. The detour route is about 11 to 14 miles.

Problem - The Riverview Drive Bridge has a sufficiency rating of 39. Deficiencies include:

- ☐ the bridge is posted for 11 tons;
- ☐ bridge is classified as functionally obsolete;
- ☐ corrosion on steel pile foundation;
- ☐ regular settlement as a result of backfill loss at east foundation;
- ☐ superstructure and substructure consists of salvaged steel girders, which create a liability to the county;
- ☐ superstructure insufficient to handle legal loads;
- ☐ bridge rail is substandard and incapable of absorbing vehicular impacts; and
- ☐ bridge useable width of 15.3 feet is too narrow.

Proposed Solution – The proposed project would replace the Riverview Drive Bridge with a 120 foot long concrete bulb tee beam superstructure founded on steel piles. The structure will also incorporate a bike and pedestrian crossing.

Project No. 2
Lewis & Clark County - Bridge System Improvements

This application received 3,838 points out of a possible 5,000 points and ranked 2 out of 17 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$223,993	Awaiting decision of the Legislature
Applicant	Cash	\$223,993	Committed by resolution, partially expended on PER
Project Total		\$447,986	

Median Household Income:	\$37,360	Total Population: 55,716
Percent Non-TSEP Matching Funds:	50%	Number of Households: 22,850

Project History - Lewis and Clark County has selected two bridges for replacement.

- ❑ Sun Canyon Road Bridge is located five miles northwest of Augusta and crosses over Willow Creek. The existing timber bridge is 18 feet long and was constructed in the early 1970s. It serves about 150-250 vehicles per day including about 80 full time and part time residences, ten ranches, Gibson Reservoir, and recreational traffic. The detour route is up to 44 miles.
- ❑ Flat Creek Road Bridge is located 11 miles southeast of Augusta and crosses over Flat Creek. The existing timber bridge is 19 feet long and was constructed in 1993. It serves about 100 vehicles per day including about 100 full time and part time residences, fifteen ranches, and recreational traffic. The detour route is about nineteen miles if traveling from one side of the bridge to the other.

Problem –

- ❑ The Sun Canyon Road Bridge has a sufficiency rating of 42. Deficiencies include:
 - ❑ the bridge is classified as structurally deficient;
 - ❑ timber stringers insufficient to handle legal loads;
 - ❑ timber stringers exhibit moderate to heavy horizontal checking;
 - ❑ deteriorating timber piles with ½" to 1" splits at the base;
 - ❑ all timber piles are rotting at the base ranging from light to heavy;
 - ❑ west piles are tipping;
 - ❑ no bridge or approach guardrail; and
 - ❑ bridge width of 19.5 feet is too narrow.
- ❑ The Flat Creek Road Bridge has a sufficiency rating of 38. Deficiencies include:
 - ❑ the bridge is not posted, but has an inventory rating of 9.5 tons;
 - ❑ the bridge is classified as functionally obsolete;
 - ❑ timber stringers insufficient to handle legal loads;
 - ❑ timber stringers exhibit minor to moderate horizontal checking;
 - ❑ deteriorating timber piles with ½" to 1" full height splits;
 - ❑ bridge rail is substandard and incapable of absorbing vehicular impacts; and
 - ❑ bridge width of 20 feet is too narrow.

Proposed Solution – The proposed project would:

- ❑ replace the Sun Canyon Road Bridge with a 55 foot long concrete tri-deck beam superstructure founded on driven piles; and
- ❑ replace the Flat Creek Road Bridge with a 22 foot span concrete box culvert.

Project No. 3
Beaverhead County –Bridge System Improvement

This application received 3,787 points out of a possible 5,000 points and ranked 3 out of 17 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$123,657	Awaiting decision of the Legislature
Applicant	Cash	\$123,657	Committed by resolution, partially expended on PER
Project Total		\$247,314	

Median Household Income:	\$28,962	Total Population: 9,202
Percent Non-TSEP Matching Funds:	50%	Number of Households: 3,684

Project History – Beaverhead County has selected one bridge for replacement. The Schoolhouse Road Bridge is located one and one-half miles south of Glen; the bridge crosses over Willow Creek. The existing steel and concrete structure is 22 feet long and was constructed in the 1930s. It serves an estimated 110 vehicles per day including eleven permanent residents, agricultural operations, and recreational use. If the bridge were closed, the detour would be about eight miles from one side of the bridge to the other.

Problem – The Schoolhouse Road Bridge has a sufficiency rating of 41. Deficiencies include:

- ☐ the bridge is classified as functionally obsolete;
- ☐ although not posted, the bridge is rated for only 6.8 tons;
- ☐ superstructure consists of salvaged steel girders insufficient to handle legal loads;
- ☐ concrete abutment exhibits several vertical cracks;
- ☐ both abutments are susceptible to scour damage;
- ☐ substandard bridge rail; and
- ☐ bridge width at 23 feet does not conform to county bridge standards.

Proposed Solution – The proposed project would replace the Schoolhouse Road Bridge with a 45 foot long steel modular bridge on a driven pile foundation

Project No. 4
Granite County - Bridge System Improvements

This application received 3,706 points out of a possible 5,000 points and ranked 4 out of 17 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$376,004	Awaiting decision of the Legislature
Applicant	Cash	\$376,004	Committed by resolution, partially expended on PER
Project Total		\$752,008	

Median Household Income:	\$27,813	Total Population: 2,830
Percent Non-TSEP Matching Funds:	50%	Number of Households: 1,200

Project History – The County has identified two bridges for replacement.

- ❑ Henderson Creek Road Bridge is located twelve miles north of Philipsburg and crosses over Flint Creek. The existing timber and steel bridge is 48 feet long and was constructed in 1965. It serves about 116 vehicles per day including eleven residences, mining operations, and recreationists. The detour route is about 27 miles from one side of the bridge to the other over roads that may be impassable at times.
- ❑ Douglas Creek Road Bridge is located ten miles south of Drummond and crosses over Flint Creek. The existing steel truss bridge is 48 feet long and was constructed in 1965. It serves about 70 vehicles per day including agricultural and mining operations, and recreational users. No permanent homes are served by the bridge. The detour route is about 37 miles from one side of the bridge to the other over roads that may be impassable at times.

Problem -

- ❑ The Henderson Creek Road Bridge has a sufficiency rating of 63. Deficiencies include:
 - ❑ the bridge is posted for 14 tons;
 - ❑ timber stringers exhibit heavy horizontal checking;
 - ❑ rotation and bulging of crib wall abutments;
 - ❑ rotation and undermining of concrete sills;
 - ❑ scour at both abutments and the pier;
 - ❑ substandard bridge rail; and
 - ❑ too narrow to handle two-way traffic.
- ❑ The Douglas Creek Road Bridge also has a sufficiency rating of 63. Deficiencies include:
 - ❑ the bridge is posted for 15 tons;
 - ❑ the bridge is classified as functionally obsolete;
 - ❑ truss members exhibit rusting, pitting, corrosion, and areas of section loss;
 - ❑ rotation and bulging and visible settlement of crib wall abutments;
 - ❑ rotation, tipping and bulging of wing walls;
 - ❑ substandard bridge rail; and
 - ❑ too narrow to handle two-way traffic.

Proposed Solution – The proposed project would:

- ❑ replace the Henderson Creek Road Bridge with an 80 foot long concrete bulb tee superstructure founded on steel piles; and
- ❑ replace the Douglas Creek Road Bridge with a 70 foot long concrete bulb tee superstructure founded on steel piles.

Project No. 5
Carbon County Bridge Replacements Project

This application received 3,638 points out of a possible 5,000 points and ranked 5 out of 17 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$455,675	Awaiting decision of the Legislature
Applicant	Cash	\$455,675	Committed by resolution, partially expended on PER
Project Total		\$911,350	

Median Household Income:	\$32,139	Total Population: 9,552
Percent Non-TSEP Matching Funds:	50%	Number of Households: 4,065

Project History – The County has identified two bridges that are in need of replacement.

- ❑ Montaquia Road Bridge is located four miles northeast of Joliet and crosses over Rock Creek. The existing steel truss bridge is 128 feet long and was constructed in 1921. It serves about 180 vehicles per day including 18 residences plus ranching and recreational traffic. The bridge is also on a mail route. The detour route is about three to seven miles.
- ❑ Poverty Flat Road Bridge is located 2.5 miles southeast of Joliet and crosses over Elbow Creek. The existing steel and concrete bridge is 16 feet long and was constructed in 1913. It serves about 80 vehicles per day including eight residences plus agricultural and recreational traffic. The bridge is also on school bus and mail routes. The detour route is about three to four miles.

Problem –

- ❑ The Montaquia Road Bridge has a sufficiency rating of 27. Deficiencies include:
 - ❑ the bridge is posted for eight tons;
 - ❑ the bridge is classified as functionally obsolete;
 - ❑ the superstructure has damaged members, significant corrosion, and deterioration;
 - ❑ the substructure has deteriorated abutments including cracking, spalling, efflorescence, and delamination; and
 - ❑ at 17 feet wide, bridge is too narrow.
- ❑ The Poverty Flat Road Bridge has a sufficiency rating of 38. Deficiencies include:
 - ❑ the bridge is classified as structurally deficient;
 - ❑ the bottom of the deck has map cracking and efflorescence;
 - ❑ the condition of exposed portion of steel stringers is poor;
 - ❑ the south abutment has rotated eight inches and settled eighteen inches; and
 - ❑ at 20 feet wide, bridge is too narrow.

Proposed Solution – The proposed project would:

- ❑ replace the Montaquia Road Bridge with a 130 foot long concrete bulb tee beam superstructure founded on steel piles; and
- ❑ replace the Poverty Flat Road Bridge with a concrete box culvert.

Project No. 6
Ravalli County - Bridge System Improvements

This application received 3,600 points out of a possible 5,000 points and ranked 6 out of 17 for funding in the 2015 Biennium.

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$212,489	Awaiting decision of the Legislature
Applicant	Cash	\$212,489	Committed by resolution, partially expended on PER
Project Total		\$439,978	

Median Household Income:	\$31,992	Total Population: 36,070
Percent Non-TSEP Matching Funds:	50%	Number of Households: 14,289

Project History - Ravalli County has selected one bridge for replacement. Willoughby Lane Bridge is located at six miles southeast of Stevensville over an irrigation canal known as the Supply Ditch. The existing steel and concrete bridge is 38 feet long and was constructed in 1958 and partially reconstructed in 1993. It serves about 900 vehicles per day including about residents, businesses and ranching. The bridge is on school bus and mail routes. The detour route is about eight miles from one end of the bridge to the other.

Problem – The Willoughby Lane Bridge has a sufficiency rating of 48. Deficiencies include:

- ☐ the bridge is posted for 10 tons;
- ☐ bridge is classified as functionally obsolete;
- ☐ superstructure consists of salvaged stringers spliced together;
- ☐ bridge rail is substandard and there are no approach rails; and
- ☐ bridge is too narrow to meet current county standards.

Proposed Solution – The proposed project would: replace the Willoughby Lane Bridge with a 50 foot long concrete tri-deck beam superstructure founded on steel piles.

2013 Biennium TSEP Emergency Grants

For the 2013 biennium, the Legislature appropriated \$100,000 to Commerce for emergency grant funding to eligible local governments. Emergency grants are only available if the project is necessary to remedy conditions that, if allowed to continue until legislative approval could be obtained, will endanger the public health or safety and expose the applicant to substantial financial risk. These grants are awarded directly through Commerce. The statute requires Commerce to report to the Governor and the Legislative Finance Committee regarding the emergency grants awarded during the previous biennium.

As of November 15th, 2012, Commerce has not awarded any 2013 biennium TSEP emergency grants.

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2013 Biennium

TSEP Planning Grants

For the 2013 Biennium, the Legislature appropriated \$900,000 to Commerce for matching infrastructure planning grant awards to eligible local governments. The originating statute requires Commerce to report to the Governor and Legislature regarding each planning grant awarded during the preceding biennium.

TSEP planning grants were available in amounts up to \$15,000 for an applicant local government. Each applicant is required to provide a 1:1 match, with funds firmly committed at the time TSEP funds are released. TSEP planning grants are awarded on a non-competitive, first come-first serve basis to applicants that meet the basic eligibility requirements of the program.

Commerce awarded 67 planning grants in the 2013 biennium, for a total of \$900,000. An additional \$3,500 in funding from the Community Development Block Grant program at Commerce was used to match these planning funds in order to provide full grant funding to all applicants in the 2013 biennium.

TSEP 2013 Biennium Planning Grants - Final Grant Awards

Grantee	County	Award Amount	Match Amount	Project Description
Alberton, Town of	Mineral	\$15,000	\$30,000	Wastewater PER
Amsterdam-Churchill WSD	Gallatin	\$6,000	\$6,000	Wastewater PER
Anaconda-Deer Lodge County	Anaconda-Deer Lodge	\$15,000	\$15,000	Bridge PER
Bainville, Town of	Roosevelt	\$11,500	\$28,500	Wastewater PER
Beaverhead County	Beaverhead	\$15,000	\$15,000	Bridge PER
Belt, Town of	Cascade	\$15,000	\$55,000	Wastewater PER
Big Horn County	Big Horn	\$15,000	\$15,000	Bridge PER
Bigfork WSD	Flathead	\$10,000	\$10,000	Wastewater PER
Blaine County	Blaine	\$15,000	\$15,000	Bridge PER
Bozeman, City of	Gallatin	\$15,000	\$15,000	Stormwater PER
Carbon County	Carbon	\$15,000	\$15,000	Wastewater PER
Cascade County (SPV)	Cascade	\$10,000	\$20,000	Stormwater PER
Cascade, Town of	Cascade	\$15,000	\$15,000	Water PER
Chester, Town of	Liberty	\$15,000	\$15,000	Wastewater PER
Chinook, City of	Blaine	\$15,000	\$20,000	Water PER
Choteau, City of	Teton	\$15,000	\$35,000	Wastewater PER
Chouteau County	Chouteau	\$15,000	\$15,000	Bridge PER
Colstrip, City of	Rosebud	\$15,000	\$51,662	Water PER
Conrad, City of	Pondera	\$15,000	\$15,000	Water PER
Cut Bank, City of	Glacier	\$15,000	\$15,000	Water PER
Drummond, Town of	Granite	\$15,000	\$15,000	Wastewater PER
Dutton, Town of	Teton	\$15,000	\$20,000	Water PER
Ekalaka, Town of	Carter	\$5,000	\$25,000	Water PER
Ennis, Town of	Madison	\$15,000	\$35,000	Water PER
Fairfield, Town of	Teton	\$15,000	\$34,000	Wastewater PER
Flaxville, Town of	Daniels	\$15,000	\$25,000	Water PER
Fort Benton, City of	Chouteau	\$15,000	\$25,000	Wastewater PER
Glacier County	Glacier	\$15,000	\$16,815	Bridge PER
Granite County	Granite	\$15,000	\$15,000	Bridge PER
Hamilton, City of	Ravalli	\$15,000	\$35,000	Wastewater PER
Harlowton, City of	Wheatland	\$15,000	\$25,000	Wastewater PER
Havre, City of	Hill	\$15,000	\$25,000	Wastewater PER
Helena, City of	Lewis and Clark	\$15,000	\$16,140	Wastewater PER
Highwood WSD	Chouteau	\$15,000	\$30,000	Wastewater PER
Jackson WSD	Missoula	\$5,000	\$15,000	Water PER
Jefferson County	Jefferson	\$15,000	\$15,000	Bridge PER
Jefferson County (Clancy)	Jefferson	\$5,000	\$15,000	Wastewater PER
Joliet, Town of	Carbon	\$15,000	\$15,000	Bridge PER
Judith Basin County	Judith Basin	\$15,000	\$15,000	Bridge PER
Lewis and Clark County	Lewis and Clark	\$15,000	\$15,000	Bridge PER
Madison County	Madison	\$15,000	\$15,000	Bridge PER
Malta, City of	Phillips	\$15,000	\$15,000	Water PER
Manhattan, Town of	Gallatin	\$15,000	\$25,000	Water PER
Missoula County	Missoula	\$15,000	\$15,000	Bridge PER
Missoula County (Seeley Lake)	Missoula	\$15,000	\$15,000	Wastewater PER

Grantee	County	Award Amount	Match Amount	Project Description
Missoula, City of	Missoula	\$15,000	\$15,000	Wastewater PER
Moore, Town of	Fergus	\$15,000	\$25,000	Wastewater PER
Pinesdale, Town of	Ravalli	\$15,000	\$15,000	Water PER
Plevna, Town of	Fallon	\$15,000	\$25,000	Water PER
Polson, City of	Lake	\$15,000	\$15,000	Wastewater PER
Ravalli County	Ravalli	\$15,000	\$15,000	Bridge PER
Riverside WSD	Gallatin	\$15,000	\$15,000	Wastewater PER
Roundup, City of	Musselshell	\$7,500	\$7,500	Water PER
Shelby, City of	Toole	\$15,000	\$15,000	Stormwater PER
Sidney, City of	Richland	\$15,000	\$25,000	Wastewater PER
South Wind WSD	Cascade	\$15,000	\$45,000	Water/Wastewater PER
Stevensville, Town of	Ravalli	\$15,000	\$20,000	Wastewater PER
Stillwater County	Stillwater	\$15,000	\$15,000	Bridge PER
Sweet Grass County	Sweet Grass	\$15,000	\$15,000	Bridge PER
Three Forks, City of	Gallatin	\$15,000	\$15,000	Water PER
Valier, Town of	Pondera	\$15,000	\$30,000	Wastewater PER
White Sulphur Springs, City of	Meagher	\$15,000	\$35,000	Wastewater PER
Winifred, Town of	Fergus	\$15,000	\$15,000	Wastewater PER
Winnett, Town of	Petroleum	\$15,000	\$15,000	Wastewater PER

**Town of Alberton
Mineral County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Alberton in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	37.5% of Project
Town	Local match	\$15,000	37.5% of Project
DNRC	RRGL Grant	\$10,000	25% of Project
Project Total		\$40,000	

Project Summary

History – The Town of Alberton is located just north of Interstate 90 on the eastern edge of Mineral County. In 2009 its population was estimated to be 418 people. Prior to 1968 the Town was served by septic tanks and three small collection systems which discharged directly into the Clark Fork River. Construction of a central wastewater collection system, two lift stations, and a 2 cell lagoon was completed in 1968. In 1973 the outfall, blower building and lift stations were upgraded. The collection system was expanded in 1986 and again in 1994.

Problem – The Town of Alberton identified the following deficiencies:

- ❑ Compliance evaluation documented numerous exceedances since 2007 of numeric limits for BOD, TSS and maximum pH. Between 1/1/2007 and 5/31/2010 DEQ documented 45 exceedances of BOD numeric limits, 11 exceedances of TSS numeric limits and 7 exceedances of pH numeric limits.

Proposed Solution – Preliminary engineering report (PER) to study upgrades and improvements to the Town of Alberton's wastewater treatment facility.

Project Status – All grant funds have been expended and the project is 100% complete.

**Amsterdam-Churchill County Water and Sewer District
Gallatin County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Amsterdam-Churchill County Water and Sewer District in the amount of \$6,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$6,000	50% of Project
District	Local match	\$6,000	50% of Project
Project Total		\$12,000	

Project Summary

History – In 1977, the communities of Amsterdam and Churchill formed a sewer district and installed a community wastewater treatment and collection system. The treatment system consisted of 2-cell facultative lagoon, storage lagoon, and land application system. Although the system was intended to utilize land application as the primary means of disposal, the system has not been used and the storage lagoon has seen minimal effluent. The existing first two cells are discharging partially treated effluent into the ground as their liners are leaking at a rate of 80,000 gallons per day.

A 2005 sanitary survey of the facility conducted by Montana Department of Environmental Quality (MDEQ) lead to an Administrative Order on Consent (AOC) issued in July 2009. The Administrative Order requires the District to comply with a set schedule to improve their treatment system and to eliminate the unpermitted discharge of their effluent. In July of 2011, MDEQ granted a 2-year extension of the AOC to allow the District to apply for the 2013 biennium funding cycle.

Problem – Amsterdam-Churchill Water & Sewer District identified the following deficiencies:

- ❑ Leaking liners in two of the District's facultative lagoons are discharging partially treated effluent into the ground.

Proposed Solution –Preliminary engineering report (PER) to study wastewater treatment system improvements for the Amsterdam-Churchill Water and Sewer District.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete. However, work product appears to be complete as a PER was submitted as part of a TSEP construction grant application in May of 2012

**Anaconda-Deer Lodge County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Anaconda-Deer Lodge County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$11,566.03	50% of Project
County	Local match	\$11,566.03	50% of Project
Project Total		\$23,132.07	
Amount to Revert		\$3,433.97	

Project Summary

History – Anaconda-Deer Lodge currently maintains 21 off-system County bridges over 20 ft. in length, with approximately 40% of these in generally poor condition. Of the 21 off-system bridges, 5 are structurally deficient and 2 are functionally obsolete.

Problem – Anaconda-Deer Lodge identified the following deficiencies:

- ❑ Seven of the bridges in the County's off-system network are either structurally deficient or functionally obsolete and require upgrades and/or replacement in order to meet regulatory requirements.

Proposed Solution –Preliminary engineering report (PER) to study and prioritize bridge and upgrades in Anaconda-Deer Lodge County.

Project Status – All grant funds have been expended and the project is 100% complete; \$3,433.97 in grant funds will revert to the Department.

**Town of Bainville
Roosevelt County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Bainville in the amount of \$11,500.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Town	Loan	\$15,000	37.5% of Project
Commerce	TSEP Planning Grant	\$11,500	28.75% of Project
DNRC	RRGL Planning Grant	\$10,000	25% of Project
Commerce	CDBG Planning Grant	\$3,500	8.75% of Project
Project Total		\$40,000	

Project Summary

History – The Town of Bainville has recently updated their lagoon system; however, there has been unprecedented growth due to the exploration of the Bakken oil field that surrounds Bainville. The town has had to reject requests for additional connections because the lagoons have reached maximum capacity at this time. This has led to concerns regarding health and safety and how the community will deal with long-term sanitation issues related to this growth and development.

Problem – The Town of Bainville identified the following deficiencies:

- ❑ Existing lagoons have reached maximum capacity.

Proposed Solution – Preliminary engineering report (PER) to study wastewater improvements to the town of Bainville's lagoon system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Beaverhead County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Beaverhead County in the amount of \$15,000.

Funding Source	Type of Funds	Amount	% of Project
Commerce	TSEP Planning Grant	\$12,596.97	50%
County	Local match	\$12,596.97	50%
Total Project Cost		\$25,193.94	
Amount to Revert		\$2,403.03	

Project Summary

History – Beaverhead County is 5,500 square miles in size with numerous major streams and irrigation canals which result in a total of 132 county maintained bridges. Maintaining this large number of bridges is a daunting task as the county's population steadily increases and the bridges quickly deteriorate. As outlined in the most recent update (2010) to the Beaverhead County Bridge Inventory and CIP, the County is responsible for the maintenance of 63 minor bridges and 69 major bridges, as defined by MDT. The County has replaced or rehabilitated 21 bridges since 1995 and 3 other bridges are scheduled for replacement over the next two years with assistance of TSEP funding. The county has also repaired numerous other structures during this time period.

Problem – Beaverhead County identified the following deficiency:

- ❑ Deteriorating bridge infrastructure due to increasing population.

Proposed Solution – Update of Beaverhead County's Bridge Inventory.

Project Status – All grant funds have been expended and the project is 100% complete; \$2,403.03 in grant funds will revert to the Department.

**Town of Belt
Cascade County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Belt in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
USDA	RD Grant	\$25,000	56% of Project
Commerce	TSEP Planning Grant	\$15,000	33% of Project
Town	Local match	\$5,000	11% of Project
Project Total		\$45,000	

Project Summary

History – The existing wastewater system was constructed in 1962 and included collection mains, a single lift station and force main, and a treatment system consisting of two continuous discharge facultative lagoons. A second lift station with force main to the treatment site was added in 1978. The most recent improvements to the system in 1997 included modifications to the treatment system to create two aerated lagoons and a single facultative lagoon, and a third lift station with associated force main. The cost of the 1997 improvements was 1.3 million and was financed primarily with CDBG and USDA Rural Development funds. In September of 2010 the Town of Belt received a violation letter from the Montana Department of Environmental Quality listing, among other violations, permit limit exceedances associated with the lack of disinfection facilities and failure to meet permit compliance schedule with respect to disinfection.

Problem – The Town of Belt identified the following deficiencies:

- ☐ Major system deficiencies including lack of flow monitoring and disinfection at all points of discharge;
- ☐ Seasonal inflow and infiltration;
- ☐ Concerns regarding the age, condition and reliability of the original 1962 lift station;
- ☐ Excessive energy costs to operate the existing treatment aeration system due to inefficiencies.

Proposed Solution – Preliminary engineering report (PER) to comprehensively study the wastewater system for the Town of Belt, including inflow and infiltration and collection main video.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete. However, work product appears to be complete as a PER was submitted as part of a TSEP construction grant application in May of 2012.

**Big Horn County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Big Horn County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
County	Local match	\$12,189.32	56% of Project
Commerce	TSEP Planning Grant	\$9,482.75	44% of Project
Project Total		\$21,672.07	
Amount to Revert		\$5,517.25	

Project Summary

History – Big Horn County currently maintains 38 off system County bridges, over 20 feet in length, with approximately 18% of these in generally poor condition. This does not include the 7 bridges under 20 feet in length, which the County is responsible for inspecting and maintaining. Of the 38 off system bridges, 5 are structurally deficient and 3 are functionally obsolete. The 7 bridges under 20 feet in length were inspected in 2009, at which time 57% were in substandard condition.

Problem – Big Horn County identified the following deficiencies:

- ☐ Compliance issues that need to be resolved to meet regulatory requirements.

Proposed Solution – Preliminary engineering report (PER) to update the County's bridge inventory, inspect the most deficient bridges and prioritize repair or replacement of bridges most in need of repair.

Project Status – All grant funds have been expended and the project is 100% complete; \$5,517.25 in grant funds will revert to the Department.

**Bigfork County Water and Sewer District
Flathead County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Bigfork County Water and Sewer District in the amount of \$10,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$10,000	50% of Project
Bigfork WSD	Local match	\$10,000	50% of Project
Project Total		\$20,000	

Project Summary

History – The Bigfork Water and Sewer District (WSD) was created in 1984 to serve the unincorporated community of Bigfork on the northeastern shore of Flathead lake at the mouth of the Swan River. The District currently maintains approximately 164,000 lineal feet of sanitary gravity sewer pipe, mostly consisting of 8 inch pipe. Pipe materials generally consist of vitrified clay, asbestos cement and PVC. In addition to the gravity mains, the District currently maintains approximately 33,000 lineal feet of force main. The District also owns and maintains sixteen sewage lift stations.

Problem – The Bigfork WSD has identified the following deficiencies:

- ☐ Infiltration remains a concern in major trunk mains around Bigfork Bay.
- ☐ The gravity sewer main in the Marina Cay Resort area is a concern to the District.
- ☐ The trunk sewer serving the West part of the District needs is undersized.
- ☐ The trunk sewer serving the North part of the District is undersized near the treatment plant.
- ☐ Lift station components have exceeded their design life.
- ☐ The North Sewer Lift Station is not pumping as it was designed.
- ☐ The Jones, Lodge and Beach Lift Stations are not hooked into SCADA and need to be routinely checked.

Proposed Solution – Preliminary engineering report (PER) to update the existing wastewater system PER.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Blaine County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Blaine County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$13,632.18	50% of Project
County	Local match	\$13,632.18	50% of Project
Project Total		\$27,264.36	
Amount to Revert		\$1,367.82	

Project Summary

History – Blaine County currently maintains 58 off system County bridges. Based on information provided by the Montana Department of Transportation, 23 bridges had sufficiency ratings of below 60, the highest being 56.5 and the lowest being 23.0. All of these bridges are considered obsolete and are eligible for replacement. The average age of these bridges is 66 years old.

Problem – Blaine County identified the following deficiencies:

- ☐ Aging and deteriorated bridges.

Proposed Solution – Preliminary engineering report (PER) to update the County's bridge inventory inspect the most deficient bridges and prioritize repair or replacements.

Project Status – All grant funds have been expended and the project is 100% complete; \$1,367.82 in grant funds will revert to the Department.

**City of Bozeman
Gallatin County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Bozeman in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
Bozeman	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – Much of the surface parking lots in downtown Bozeman were built in a time when there wasn't much concern for stormwater quality. In the urban environment near downtown Bozeman, the creek is piped underground, channelized, and runoff is allowed to discharge untreated directly into the creek. The city of Bozeman is permitted for a Storm Water Discharge Associated with Small Municipal Separate Storm Sewer System (MS4) through the Montana Department of Environmental Quality (MDEQ). This permit has set effluent limits for any discharge of stormwater.

Problem – The City of Bozeman identified the following deficiencies:

- ❑ Sampling in the downtown area has demonstrated a lack of compliance with some of the parameters of the MS4 permit, including total suspended solids, oils and grease.

Proposed Solution – Preliminary engineering report (PER) to study surface runoff and address stormwater quality and quantity issues in the City of Bozeman.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Carbon County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Carbon County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$14,672.54	50% of Project
County	Local match	\$14,672.55	50% of Project
Project Total		\$29,345.09	
Amount to Revert		\$327.46	

Project Summary

History – The County is responsible for the maintenance of 50 bridges (40 major bridges and 10 minor bridges, as defined by MDT). The County has replaced or repaired 28 bridges and culverts since 1997.

Problem – Carbon County identified the following deficiencies:

- ❑ Bridge replacement and/or rehabilitation to meet regulatory, compliance and permit requirements.

Proposed Solution – Preliminary engineering report (PER) to update the County's Bridge Inventory.

Project Status – All grant funds have been expended and the project is 100% complete; \$327.46 in grant funds will revert to the Department.

**Cascade County, on behalf of the unincorporated community of Sun Prairie Village
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Cascade County in the amount of \$10,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$10,000	33.3% of Project
County	Local match	\$10,000	33.3% of Project
DNRC	RRGL Grant	\$10,000	33.3% of Project
Project Total		\$30,000	

Project Summary

History – Sun Prairie Village was first subdivided and infrastructure was constructed in the 1970s. At the time, all rights of way associated with the development were dedicated to Cascade County. Sun Prairie is now home to approximately 1,700 residents and is currently one of the largest unincorporated communities in the state.

Problem – Cascade County has identified the following deficiencies:

- ❑ Extensive flooding due to insufficient storm water infrastructure and lack of proper planning when the subdivision was first developed.
- ❑ Improper drainage and lack of suitable subgrade materials have caused an abundance of pot holes through the subdivision's roadways.

Proposed Solution – Preliminary engineering report (PER) to study the storm water system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Town of Cascade
Cascade County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Cascade in the amount of \$15,000.

Funding Source	Type of Funds	Amount	% of Project
Commerce	TSEP Planning Grant	\$15,000	50%
Town	Local match	\$15,000	50%
Total Project Cost		\$30,000	

Project Summary

History – The Town of Cascade is served by two deep wells and a spring source. Constructed in 1915, Cascade’s original water distribution system consisted primarily of steel and cast iron pipes. A PER was originally completed in 1999 by Morrison-Maierle and was updated in 2004 and 2008. The Town of Cascade has completed several phases of projects identified in the original PER and addendums including a new water well, water meters, new water storage tank and transmission main. While the Town has made significant progress in updating its water system components over the past 12 years, what remains of the original water distribution system is nearly 100 years old, undersized and experiences frequent water main leaks.

Problem – The Town of Cascade identified the following deficiency:

- ❑ Cascade’s original water distribution is old, undersized and leaks; it is at the end of its useful life cycle and requires improvement or replacement.

Proposed Solution – Preparation of a preliminary engineering report (PER) addendum to update original PER study of the Town of Cascade’s water system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete. However, work product appears to be complete as a PER was submitted as part of a TSEP construction grant application in May of 2012.

**Town of Chester
Liberty County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Chester in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
Town	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The Town of Chester’s wastewater treatment facility was constructed in 1984 and has not undergone an upgrade. The facility is comprised of a sanitary sewer collection system with four lift stations and a clay-lined three celled facultative lagoon system. The cells are operated in series during the summer months and parallel in the winter. The overall system is 14.3 acres and designed to have 260 days detention time when run in series and 180 days when run in parallel. Discharge was designed to be intermittent controlled releases into Cottonwood Creek.

Problem – The Town of Chester identified the following deficiencies:

- ☐ Infiltration in the system.
- ☐ Electrical panels at the four lift stations are aging and are in need of upgrade.

Proposed Solution – Preliminary engineering report (PER) to study the Town’s wastewater system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**City of Chinook
Blaine County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Chinook in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
City	Local match	\$20,000	57% of Project
Commerce	TSEP Planning Grant	\$15,000	43% of Project
Project Total		\$35,000	

Project Summary

History – The City of Chinook obtains its water from the Milk River. Raw water is diverted to the Water Treatment Plant (WTP) through the intake structure adjacent to the WTP. The WTP was constructed in 1976 and renovated in 1998. The existing plant consists of package treatment units which provide flocculation, settling and filtration in two compartmentalized tanks. The treatment process includes other components housed in a prefabricated metal building such as raw and finished water pumping, chemical feed, laboratory and administrative office space.

Problem – City of Chinook identified the following deficiencies:

- ☐ DEQ violation was issued as the City exceeded the maximum contaminant level (MCL) for total haloacetic acids.

Proposed Solution – Preliminary engineering report (PER) to study the drinking water system.

Project Status – All grant funds have been expended and the project is 100% complete.

**City of Choteau
Teton County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to City of Choteau in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
City	Local match	\$19,943.61	44.4% of Project
Commerce	TSEP Planning Grant	\$15,000.00	33.4% of Project
DNRC	RRGL Grant	\$10,000.00	22.2% of Project
Project Total		\$44,943.61	

Project Summary

History – The City of Choteau utilizes a 27 acre facultative lagoon for wastewater treatment. It currently discharges to an unnamed ditch that ultimately empties into the Teton River. The historical challenge for this system has been an enormous amount of infiltration of groundwater entering the collection system and reaching the lagoon. Over the last ten years, the City has completed three major I/I reduction projects and eliminated potentially over one million gallons of infiltration per day into the system. Most recently, the City completed an additional infiltration reduction project and added a disinfection system to the wastewater treatment system, per a compliance mandate in the City's MPDES permit. This project appears to have eliminated at least another 150,000 gpd of infiltration and identified a number of major point source contributors into the system. In short, the City may be reaching the limits of the infiltration that can be eliminated from the system, given a significant portion of the City's collection system and numerous basements are below the water table at times such that sump pumps, sewer service lines and imperfect collection lines will continue to contribute significant amounts of groundwater into the system.

Problem – The City of Choteau identified the following deficiencies:

- ❑ Ongoing battle against the infiltration along with an over 50 years old facultative lagoon with short circuiting issues and limited treatment capability.

Proposed Solution – Preliminary engineering report (PER) to study the wastewater treatment system.

Project Status – All grant funds have been expended and the project is 100% complete.

**Chouteau County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Chouteau County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$12,643.73	50% of Project
County	Local match	\$12,643.73	50% of Project
Project Total		\$25,287.46	
Amount to Revert		\$2,356.27	

Project Summary

History – Chouteau County currently maintains 18 off system County bridges. Based on information provided by the Montana Department of Transportation, 3 bridges have sufficiency ratings of below 70, the highest being 66.8 and the lowest being 45.5. All of these bridges are considered obsolete. The average age of these bridges is 57 years old.

Problem – Chouteau County identified the following deficiencies:

- ☐ Aging and unsafe bridges.

Proposed Solution – Preliminary engineering report (PER) to update the County's bridge inventory, inspect the most deficient bridges and prioritize repair or replacement of bridges.

Project Status – All grant funds have been expended and the project is 100% complete; \$2,356.27 in grant funds will revert to the Department.

**City of Colstrip
Rosebud County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Colstrip in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	Coal Board grant	\$36,662	55% of Project
Commerce	TSEP Planning Grant	\$15,000	22.5% of Project
Colstrip	Local match	\$15,000	22.5% of Project
Project Total		\$66,662	

Project Summary

History – The City of Colstrip’s water treatment facility went online in April of 1981. The original townsite mains were upgraded in 2001 and 2002. The rest of the expansion was complete in 1981 and 1982. The system is aging and needs upgrades in all areas. The city has not been issued an Administrative Order; however, the last major improvement to the system was an on-site generation system in 2007, which replaced the old gaseous chlorine system for disinfection.

Problem – The City of Colstrip identified the following deficiencies:

- ☐ The existing water treatment system is aging and in need of upgrades and/or replacement.

Proposed Solution – Preliminary engineering report (PER) to study the water system for the City of Colstrip.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**City of Conrad
Pondera County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Conrad in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	22.5% of Project
Conrad	Local match	\$15,000	22.5% of Project
Project Total		\$30,000	

Project Summary

History – The City of Conrad's water system has generally been well-maintained, but with recent required upgrades to water treatment and wastewater systems, the city has become financially strapped. In order to continue to properly maintain and upgrade the distribution system, and insure adequate fire flows, assistance is needed.

Problem – The City of Conrad identified the following deficiencies:

- ☐ The existing water system has dead-end and undersized lines that may be insufficient;
- ☐ The existing water system has air binding occurring in the treatment facility.

Proposed Solution –Preliminary engineering report (PER) to study potential upgrades to the water system for the City of Conrad.

Project Status – All grant funds have been expended and the project is 100% complete.

**City of Cut Bank
Glacier County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Cut Bank in the amount of \$15,000.

Funding Source	Type of Funds	Amount	% of Project
Commerce	TSEP Planning Grant	\$15,000	50%
City	Local match	\$15,000	50%
Total Project Cost		\$30,000	

Project Summary

History – The water system that serves the City of Cut Bank consists of a conventional treatment system, distribution piping, storage tank and a booster pump. The City's water source is Cut Bank Creek. A PER was originally completed in 2006 by Great West Engineering, Inc. and was updated in 2008 and 2010 to adjust costs, refine the distribution analysis, revise distribution phasing and provide additional environmental review and agency comment.

Problem – The City of Cut Bank identified the following deficiency:

- ❑ Approximately 40% of the water main's existing distribution system is undersized and corroded, contributing to overall water system deficiencies;
- ❑ The water system infrastructure does not satisfy current state design standards or ISO standards for fire flow and storage.

Proposed Solution – Preparation of a preliminary engineering report (PER) addendum to update original PER study of the City of Cut Bank's water system and address deficiencies.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Town of Drummond
Granite County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Drummond in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
Town	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The Town of Drummond utilizes a central wastewater collection and treatment system. In 2005 the town completed a project that included the relining of the entire collection system to reduce inflow and infiltration. Prior to the project, the single cell lagoon discharged into the Clark Fork River. There has been no discharge to the river following completion of the project. Leakage study completed on the lagoon revealed the lagoon is leaking at a rate which is more than levels currently allowed by the Montana Department of Environmental Quality. The treatment system consists of only a single cell lagoon which provides limited treatment. The lagoon is located directly adjacent to and is designed to discharge to the Clark Fork River, which is a very sensitive waterway with regard to nutrient loading. The MT DEQ is expected to complete the general permit for wastewater treatment systems this year, and considerable improvements to the wastewater treatment system are anticipated.

Problem – The town of Drummond identified the following deficiencies:

- ❑ Leaking liner in the town's only lagoon.

Proposed Solution – Preliminary engineering report (PER) to study improvements to the wastewater treatment system for the town of Drummond.

Project Status – All grant funds have been expended and the project is 100% complete.

**Town of Dutton
Teton County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Dutton in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Town	Local match	\$20,000	57% of Project
Commerce	TSEP Planning Grant	\$15,000	43% of Project
Project Total		\$35,000	

Project Summary

History – The Town of Dutton's water supply consists of an infiltration gallery near the banks of the Teton River located approximately six miles north of Dutton. Water is pumped to the town via an 8-inch asbestos cement transmission main that was constructed in the 1950s. The distribution system consists primarily of asbestos cement pipe, which was constructed in the 1970s. Storage is provided by a 500 thousand gallon on-grade steel bolted reservoir located approximately one mile south of Dillon.

Major upgrades completed in the early 1990's included the replacement of one mile of transmission main, rip-rapping of the Teton River bank to protect the well, construction of the 500,000 gallon water tank, improvements to the well house and construction of a chlorination vault.

Problem – The Town of Dutton identified the following deficiencies:

- ☐ The existing water tank is nearly twenty years old and due for recoating;
- ☐ One mile or transmission line has frequent water main breaks;
- ☐ Water valves are in poor condition.

Proposed Solution –Preliminary engineering report (PER) to study modifications to the Town of Dutton's water supply system.

Project Status – All grant funds have been expended and the project is 100% complete.

**Town of Ennis
Madison County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Ennis in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	30% of Project
Town	Local match	\$15,000	30% of Project
DNRC	RRGL Loan	\$20,000	40% of Project
Project Total		\$50,000	

Project Summary

History – The Ennis water system provides domestic water and limited fire protection fo the area within the existing Town limits. The oldest portions of the system date back to 1960. The existing system consists of several components including two groundwater wells, a 500,000 gallon storage reservoir, a 14” transmission main, distribution main and associated services.

A study conducted in 1991 identified deficiencies in the community water storage and water distribution system; many of the improvements and upgrades suggested were completed in 1994. A preliminary engineering report completed in 2008 identified additional deficiencies in the water supply and distribution system that require upgrades in order to comply with DEQ-1 Section 3.2.1.1, which stipulates the total developed groundwater source capacity shall be equal to or exceed the design maximum day demand with the largest producing well out of service.

Problem – The Town of Ennis identified the following deficiencies:

- ☐ Insufficient supply of water.

Proposed Solution – Update to the 2008 preliminary engineering report (PER) to study the water system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Town of Ekalaka
Carter County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Ekalaka in the amount of \$5,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	CDBG Planning Grant	\$20,000	66.6% of Project
Commerce	TSEP Planning Grant	\$5,000	16.7% of Project
Town	Local match	\$5,000	16.7% of Project
Project Total		\$30,000	

Project Summary

History – Ekalaka is an incorporated community of approximately 370 people with local businesses, health care and public school facilities. The Town's water system consists of two primary wells, chlorination, distribution piping and two 100,000 gallon storage tanks. The most urgent problem facing the Town is the age of its distribution system, much of which is over 60 years old and leaking badly.

Problem – The Town of Ekalaka identified the following deficiencies:

- ☐ Age of system and the Town is losing approximately 40% of its water due to leakage.

Proposed Solution – Preliminary engineering report (PER) to study the water system.

Project Status – All grant funds have been expended and the project is 100% complete.

**Town of Fairfield
Teton County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Fairfield in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Town	Local match	\$24,000	49% of Project
Commerce	TSEP Planning Grant	\$15,000	31% of Project
DNRC	RRGL	\$10,000	20% of Project
Project Total		\$49,000	

Project Summary

History – The original wastewater treatment system in Fairfield was installed in the 1960's. The system consists of approximately 14,900 lineal feet of 8" pipe, 3,320 lineal feet of 10" pipe and 3,890 lineal feet of 12" cement sewer pipe and manholes. The system is considered a conventional gravity sewer with no lift stations or force main piping. Since that time, additional sewage collection pipe has been added to the system. This addition to the sewer system consists of polyvinyl chloride (PVC) pipe. Cured-in-place pipe (CIPP) rehabilitation to the sewer main outfall was completed in 2006. Approximately 1/3 of the outfall pipe was rehabilitated at that time. A comprehensive sewer main rehabilitation took place in 2009-2012 which included repair of sags and other pipe deficiencies, CIPP installation, sewer service repair and manhole rehabilitation, which resulted in significant reduction of infiltration. A new discharge structure at the lagoon was also installed as part of this project.

The current treatment system consists of a single cell facultative discharging lagoon that was constructed with the original collection system. The lagoon is located approximately ½ mile northwest of the town, and is 11 acres in size with an average depth of five (5) feet.

Problem – The Town of Fairfield identified the following deficiencies:

- ❑ Existing wastewater treatment system cannot adequately meet current needs and future sewer contributions;
- ❑ Partially treated wastewater appears to be entering the town's shallow aquifer;
- ❑ Both the 1994 and 2003 MDEQ reports indicate evidence of lagoon seepage;
- ❑ Existing treatment system does not satisfy a number of current MDEQ standards for detention time, leakage limits and Biological Oxygen Demand (BOD);
- ❑ The treatment facility has reported a number of permit violations over the past 10 years, including a violation reported in July 2011.

Proposed Solution – Preliminary engineering report (PER) to study the town of Fairfield's wastewater treatment system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete. However, work product appears to be complete as a PER was submitted as part of a TSEP construction grant application in May of 2012.

**Town of Flaxville
Daniels County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Flaxville in the amount of \$15,000.

Funding Source	Type of Funds	Amount	% of Project
Commerce	TSEP Planning Grant	\$11,330.58	35%
Town of Flaxville	Local match	\$11,330.59	35%
DNRC	RRGL Grant	\$10,000	30%
Total Project Cost		\$32,661.17	
Amount to Revert		\$3,669.42	

Project Summary

History – Flaxville is an incorporated community of approximately 87 people that is primarily residential. Flaxville's water is supplied by two wells that exceed the MCL for nitrate thus requiring treatment at a minimum.

Problem – The Town of Flaxville identified the following deficiency:

- Water exceeded the MCL for nitrates.

Proposed Solution – Preliminary engineering report (PER) to study the water system in Flaxville.

Project Status – All grant funds have been expended and the project is 100% complete; \$3,669.42 will revert to the Department.

**City of Fort Benton
Chouteau County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Fort Benton in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	37.5% of Project
Fort Benton	Local match	\$15,000	37.5% of Project
BSTF	Other match	\$10,000	25% of Project
Project Total		\$40,000	

Project Summary

History – The City of Fort Benton is an incorporated community of approximately 1,464. The sanitary sewer collection system has approximately 750 hookups, which include individual residences and local businesses. The collection system gravity flows to the City's only lift station, which is located on 19th Street and River Road. Influent is then pumped through a force main, which is a 10 inch tar steel pipe. The force main is estimated to be over 40 years old. The main runs immediately adjacent to the Missouri River for approximately one mile to the treatment plant. Influent samples are collected at the lift station. There are no additional sources contributing wastewater in between the lift station and the treatment plant. The 2009 Capital Improvement Plan (CIP) noted that the lift station is "in need of major upgrades including a new control system and possibly a total replacement of the lift station."

Problem – City of Fort Benton identified the following deficiencies:

- ❑ Upgrade needed to the aeration components of the lagoon system to bring the system into permit compliance.
- ❑ Effluent limits have been exceeded on 34 occasions during the months of April 2007 and September 2009 monitoring period.
- ❑ DEQ compliance – Administrative Order on Consent to Address Violations of Water Quality.

Proposed Solution – Preliminary engineering report (PER) to assess the wastewater collection, lift station and treatment systems, identifying deficiencies and alternatives to address the deficiencies.

Project Status – All grant funds have been expended and the project is 100% complete.

**Glacier County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Glacier County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$11,995.04	50% of Project
County	Local match	\$11,955.04	50% of Project
Project Total		\$23,990.07	
Amount to Revert		\$3,004.96	

Project Summary

History – Glacier County intends to update their bridge inventory and inspect the most deficient bridges and prioritize the bridges that need repair or replacement. They will also develop road and bridge standards.

Problem – Glacier County identified the following deficiencies:

- ☐ Bridge replacement and/or rehabilitation to meet regulatory, compliance and permit requirements.

Proposed Solution – Preliminary engineering report (PER) to update the County's bridge inventory.

Project Status – All grant funds have been expended and the project is 100% complete; \$3,004.96 in grant funds will revert to the Department.

**Granite County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Granite County in the amount of \$15,000.

Funding Source	Type of Funds	Amount	% of Project
Commerce	TSEP Planning Grant	\$14,999.66	50%
County	Local match	\$14,999.66	50%
Total Project Cost		\$29,999.32	
Amount to Revert		\$0.34	

Project Summary

History – Granite County is responsible for the maintenance of 38 bridges (17 major bridges and 21 minor bridges, as defined by MDT). The county has replaced six bridges since 1998 and has applied for TSEP funds to replace three other bridges. The county has also repaired and rehabilitated numerous other structures during this time period.

Problem – Granite County identified the following deficiency:

- ❑ Deteriorating bridge infrastructure and statutory requirement to maintain all public bridges, except those maintained by the Montana Department of Transportation.

Proposed Solution – Update of Granite County's Bridge Inventory.

Project Status – All grant funds have been expended and the project is 100% complete; \$0.34 in grant funds will revert to the Department.

**City of Hamilton
Ravalli County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Hamilton in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
City	Local match	\$35,000	70% of Project
Commerce	TSEP Planning Grant	\$15,000	30% of Project
Project Total		\$50,000	

Project Summary

History – In 2004, the City of Hamilton began planning for the future of their wastewater infrastructure. The goals of the planning effort were to define the existing infrastructure, estimate future populations and wastewater quantities, determine improvements needed to meet future permit requirements and accommodate growth, and develop an improvements strategy for the City's wastewater system. In 2006, HDR assisted the City in the development and adoption of the 2006 Hamilton Wastewater Facilities Plan, which provided a vision for the wastewater treatment plant and wastewater collection system. In 2007 the city adopted new user rates and development impact fees to provide the necessary funding for planned improvements.

Based upon the priority of the needed improvements at the wastewater treatment plant and the desire of the city to properly address needed improvements in a fiscally responsible manner, the city planned for implementation of facilities improvements in project phases. The city successfully completed Phase I improvements by upgrading the treatment plant electrical services entrance, installing a new standby power generator, improving solids treatment, dewatering and biosolids dewatering and composting, and necessary headworks improvements. In 2006 the Plan determined the next phase of the city's wastewater treatment plant improvements are associated with permit compliance, with a primary focus on the expansion of the liquid stream treatment capacity and nutrient removal capability. The city has also planned to construct disinfection system improvements and additional administration and lab space to accommodate laboratory requirements associated with nutrient removal as part of Phase III. The MPDES Discharge Permit issued to the city in 2011 requires additional sampling and testing and includes more stringent disinfection and total residual chlorine requirements, which triggered reprioritization of project priorities.

Problem – The City of Hamilton identified the following deficiencies:

- ☐ Inadequate disinfection system and laboratory facilities.

Proposed Solution –Preliminary engineering report (PER) to study Phase II wastewater treatment plant improvements in the City of Hamilton.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete. However, work product appears to be complete as a PER was submitted as part of a TSEP construction grant application in May of 2012.

**City of Harlowton
Wheatland County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Harlowton in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	37.5% of Project
City	Local match	\$15,000	37.5% of Project
DNRC	RRGL Grant	\$10,000	25% of Project
Project Total		\$40,000	

Project Summary

History – The City of Harlowton’s wastewater system was constructed in 1998. It consists of a gravity collection system and a three-celled aerated lagoon, with a total volume of 8.37 million gallons. The design flow for the lagoons is 220,000 gallons per day. The City has a current population of approximately 1,060 residents.

Harlowton received a new discharge permit for its existing aerated wastewater treatment lagoons in August of 2009. The discharge permit includes more stringent effluent limits, discussed problems with the existing aerated lagoons and contains a compliance schedule for correcting deficiencies.

Problem – The City of Harlowton identified the following deficiencies:

- ❑ The aerated lagoons have exceeded the 30-day average Biochemical Oxygen Demand (BOD) limit of 30 mg/l twelve times and the 7-day average BOD limit of 45 mg/l once between 2004 and 2008;
- ❑ The aerated lagoons have exceeded the 30-day Total Suspended Solids (TSS) limit of 100 mg/l three times between 2004 and 2008;
- ❑ Effluent BOD levels have deteriorated between 2004 and 2008, based on yearly averages of monthly permit reporting data.

Proposed Solution – Preliminary engineering report (PER) to study the City of Harlowton’s wastewater treatment system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete. However, work product appears to be complete as a PER was submitted as part of a TSEP construction grant application in May of 2012.

**City of Havre
Hill County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Havre in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	37.5% of Project
City	Local match	\$15,000	37.5% of Project
DNRC	RRGL Grant	\$10,000	25% of Project
Project Total		\$40,000	

Project Summary

History – The City of Havre’s wastewater treatment facility was constructed in 1950 and has been expanded or modified three times (1974, 1986 and 1997). The original plant consisted of a main effluent line, grit chamber, influent flow meter, two comminators, influent pump stations, one primary clarifier, two anaerobic digesters, one chlorine contact basin with chlorine building and sandy drying beds. The 1974 modification included the addition of two aeration basins with four mechanical aerators, expansion of the chlorine contact chamber with new chlorine equipment, the addition of one secondary clarifier, conversion of the primary clarifier to a secondary clarifier, conversion of the anaerobic digesters with three blowers and the addition of a two-acre sludge lagoon with abandonment of the sand drying beds. The 1986 modification included the addition of a mechanical bar screen and removal of comminators, addition of a Pista vortex grit chamber, aeration basin and secondary clarifier, modifications to piping to allow series/parallel flow combinations, addition of flow current/sludge deflection baffles to both secondary clarifiers, addition of sulphur dioxide de-chlorination facilities and the addition of an eight acre sludge lagoon. The 1997 modification was the expansion and upgrade of the aerobic digestion sludge handling and treatment system. Discharge of treated wastewater is to the Milk River.

Problem – The City of Havre identified the following deficiencies:

- ❑ The city is required to upgrade the current wastewater treatment facility to meet final total ammonia effluent limits pursuant to permit No. MT0022535.

Proposed Solution – Preliminary engineering report (PER) to study upgrades to the city of Havre’s wastewater treatment system.

Project Status – All grant funds have been expended and the project is 100% complete.

**City of Helena
Lewis & Clark County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Helena in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
City	Local match	\$16,140	52% of Project
Commerce	TSEP Planning Grant	\$15,000	48% of Project
Project Total		\$31,140	

Project Summary

History – The Helena Tenmile WTP was constructed in the late eighties for the purpose of treating water from the surface water supplies located within the Tenmile Creek Basin. The plant was designed to operate year round with a 3.0 MGD winter production rate, 6.0 MGD summer and a full design capacity of 9.0 MGD. The infiltration cells have limited hydraulic capacity, necessitating a discharge which presumably reaches Tenmile Creek. This discharge has the potential to violate Montana surface and groundwater quality standards.

Problem – The City of Helena identified the following deficiencies:

- ❑ The plant must be in compliance with the effluent standards of the permit by January 1, 2016.

Proposed Solution – Preliminary engineering report (PER) to study the water treatment plant.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Highwood County Water & Sewer District
Chouteau County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Highwood County Water & Sewer District in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	33.3% of Project
District	Local match	\$15,000	33.3% of Project
DNRC	RRGL Grant	\$15,000	33.3% of Project
Project Total		\$45,000	

Project Summary

History – The existing sanitary sewer facilities in the community of Highwood consist of a collection system and treatment system. The system has approximately 70 hookups, which include individual residences, businesses and schools.

The collection system facilities include the collection pipes, manholes and lift station. The system is approximately 20 years old and consists of PVC pipe. The pipe sizes are 8 inch, 10 inch and 12 inch diameter lines.

In 1999 the District undertook a major renovation to its treatment facility and lift station; however, deficiencies remain. The District also has a discharge permit which allows the District to discharge into Highwood Creek. In the past several years there have been violations with regard to this permit.

Problem – The Highwood WSD identified the following deficiencies:

- ☐ Liner in Pond #1 has ripped, and the liner has been determined to be deteriorating;
- ☐ There have been violations of the discharge permit into Highwood Creek, related to inadequate reporting and problematic outfall.

Proposed Solution – Preliminary engineering report (PER) to study the District's wastewater system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Jackson County Water and Sewer District
Missoula County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Jackson County Water and Sewer District in the amount of \$5,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
DNRC	RRGL Planning Grant	\$10,000	50% of Project
Commerce	TSEP Planning Grant	\$5,000	25% of Project
District	Local match	\$5,000	25% of Project
Project Total		\$20,000	

Project Summary

History – The original Jackson water system was constructed in the 1940's. The system serves approximately 35 residents. The water system consists of the source supply (Jardine Hot Springs), a concrete cistern, one 3-inch and two 6-inch transmission mains, and the distribution system consisting of 6-inch PVC water mains. Some improvements were completed in 1991; these included a new transmission main, new services to all buildings in the District, and improvements to the storage cistern. The 1991 plan showed a new storage tank and pump station, however these were never built and water is fed by gravity from the cistern to the distribution system. Because of the limited elevation head available, the pressure available in the distribution system is only 10 PSI, and so each service is provided an individual booster pump to develop adequate pressure within the residence or business.

Montana DEQ prepared a Source Water Delineation and Assessment Report (SWDA) for the district in January 2007. The report classifies the spring as a deep bedrock groundwater source due to its high temperature, although some mixing with shallower groundwater occurs. The recharge area is not identified.

Problem – The Jackson Water & Sewer District identified the following deficiencies:

- ❑ The source water quality for the District exceeds the MCL for arsenic, approaches the MCL for antimony, exceeds the SMCL for sodium and TDS, and has in the past exceeded the SMCL for fluoride;
- ❑ Sanitary concerns related to deterioration of interior concrete walls and unscreened overflow pipes;
- ❑ Potential for booster pumps to develop negative pressure in the distribution system under certain conditions;

Proposed Solution – Preliminary engineering report (PER) to study water system modifications or upgrades to the Jackson Water & Sewer District system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Jefferson County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Jefferson County in the amount of \$15,000.

Funding Source	Type of Funds	Amount	% of Project
Commerce	TSEP Planning Grant	\$14,990.90	50%
County	Local match	\$14,990.90	50%
Total Project Cost		\$29,981.80	
Amount to Revert		\$0.10	

Project Summary

History – Jefferson County is responsible for the maintenance of 39 bridges. The County has replaced or repaired 18 bridges since 2003. The County is presently awaiting the results of a 2010 application to the TSEP program for the replacement of three critically rated structures.

Problem – Jefferson County identified the following deficiency:

- ❑ Health and safety of the traveling public. Due to funding shortfalls the County is unable to fund the necessary repairs and replacements to their bridge infrastructure within a reasonable timeframe.

Proposed Solution – Preliminary engineering report (PER) for one or more of the critically rated bridges.

Project Status – All grant funds have been expended and the project is 100% complete; \$0.10 in grant funding will revert to the Department.

**Jefferson County, on behalf of the unincorporated community of Clancy
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Jefferson County, on behalf of the unincorporated community of Clancy, in the amount of \$5,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
DNRC	RRGL Grant	\$10,000	50% of Project
Commerce	TSEP Planning Grant	\$5,000	25% of Project
County	Local match	\$5,000	25% of Project
Project Total		\$20,000	

Project Summary

History – The proposed project was initiated by Jefferson County in 2009 on behalf of the unincorporated community of Clancy. In July 2010, Jefferson County completed a preliminary engineering report that identified several compliance issues with Clancy's current wastewater treatment facilities. One of the most prominent non-compliance issues is the close proximity of drinking water wells to septic systems (less than 100 feet separation). The small lot sizes within the proposed district does not allow for adequate separate between well and drainfields. The majority of these systems are cesspools, seepage pits or metal septic tanks with drainfields that either have failed or have a high potential of failing in the near future. Coupled with poor treatment characteristics of the soils is a high groundwater table and close proximity to Prickly Pear Creek, so there is an increasingly high probability of contaminating the groundwater and water supply wells.

Problem – Jefferson County has identified the following deficiencies:

- ❑ Existing conditions are a public health hazard for the community and warrant the construction of a centralized wastewater collection and treatment system.

Proposed Solution – Preliminary engineering report (PER) to update the 2010 wastewater system PER.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Town of Joliet
Carbon County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Joliet in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
Town	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The existing wastewater collection system has severe infiltration on a seasonal basis. The Town is having an increasing problem with floatable solids entering the lagoon and plugging up the aeration system.

Problem – The Town of Joliet identified the following deficiencies:

- ☐ The system has exceeded the MPDES Permit limitations for BOD, TSS or pH 34 times since October 2007.
- ☐ The treatment system is currently at its maximum capacity.

Proposed Solution – Preliminary engineering report (PER) to study the wastewater system.

Project Status – All grant funds have been expended and the project is 100% complete.

**Judith Basin County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Judith Basin County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$9,272	50% of Project
Judith Basin County	Local match	\$9,272	50% of Project
Project Total		\$18,544	
Amount to Revert		\$5,728	

Project Summary

History – Judith Basin County intends to update their bridge inventory and inspect their most deficient bridges and prioritize the bridges that need repair or replacement. They will also develop road and bridge standards.

Problem – Judith Basin County identified the following deficiencies:

- ☐ Bridge replacement and/or rehabilitation to meet regulatory, compliance and permit requirements.

Proposed Solution – Preliminary engineering report (PER) to update the County's bridge inventory.

Project Status – All grant funds have been expended and the project is 100% complete; \$5,728 in grant funding will revert to the Department.

**Lewis & Clark County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Lewis & Clark County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$14,552.42	50% of Project
Lewis & Clark County	Local match	\$14,552.43	50% of Project
Project Total		\$29,104.85	
Amount to Revert		\$447.58	

Project Summary

History – Lewis & Clark County is responsible for the maintenance of 90 bridges. The County has replaced or repaired 43 bridges since 1997, including 17 through the assistance of TSEP. The County continues their bridge maintenance program with the update of the 2008 bridge inventory, CIP and prioritization of the County's bridge needs.

Problem – Lewis & Clark County identified the following deficiencies:

- ☐ Due to funding shortfalls the County is unable to fund the necessary repairs and replacements to their bridge infrastructure within a reasonable timeframe.

Proposed Solution – Preliminary engineering report (PER) to update the County's bridge inventory, inspect the most deficient bridges and prioritize repair or replacement of bridges most in need of repair.

Project Status – All grant funds have been expended and the project is 100% complete; \$447.58 in grant funding will revert to the Department.

**Madison County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Madison County in the amount of \$15,000.

Funding Source	Type of Funds	Amount	% of Project
Commerce	TSEP Planning Grant	\$ 10,378.17	50%
County	Local match	\$ 10,378.18	50%
Total Project Cost		\$20,756.35	
Amount to Revert		\$4,621.83	

Project Summary

History – Madison County developed and adopted the 2002 Bridge Evaluation and Capital Improvement Plan and updated the Plan in 2004, 2006, 2008 and 2010. These updates inventoried and prioritized 46 of the County's bridges with the primary focus on minor structures with several major structures also evaluated. The County retained an engineer to review existing bridges, inspect and evaluate additional bridges in their system with immediate concerns and update the County's prioritized list.

Problem – Madison County identified the following deficiency:

- ❑ Unable to fund the necessary repairs and replacements to bridge infrastructures within a reasonable timeframe due to funding shortfalls.

Proposed Solution – Preliminary engineering (PER) report to update the County's bridge inventory and inspect critical bridges throughout the County.

Project Status – All grant funds have been expended and the project is 100% complete; \$4,621.83 in grant funding will revert to the Department.

**City of Malta
Phillips County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Malta in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
Malta	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The City of Malta’s water system was originally constructed in the 1940s with various additions through the 1970s. There have been no upgrades to the system since the original construction. The City’s water is supplied through four wells, ranging in depth from 60 to 71 feet, with three wells producing approximately 900 gpm and the other producing approximately 400 gpm. The City also maintains two storage tanks, a 400,000 gallon tank built in 1981 and a 176,000 gallon tank built in the 1940s. The distribution system to the City’s approximate 960 users consists of pipe ranging in size from four inch to twelve inch pipe made of asbestos cement, ductile iron, cast iron and plastic.

Problem – City of Malta identified the following deficiencies:

- ☐ High levels of manganese.
- ☐ Maintenance and upgrade issues (water line and valve breaks, low water pressure and service line leaks) as a result of the almost 70 year old system.

Proposed Solution – Preliminary engineering report (PER) to study the City’s water system.

Project Status – All grant funds have been expended and the project is 100% complete.

**Town of Manhattan
Gallatin County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Manhattan in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	37.5% of Project
Town	Local match	\$15,000	37.5% of Project
DNRC	RRGL Grant	\$10,000	25% of Project
Project Total		\$40,000	

Project Summary

History – Immediately following incorporation in 1911, the newly created Town began work on the installation of its public drinking water supply system. Work started in 1912, a year following incorporation, to install the mains and develop a natural (gravity) spring south of Town. This spring is still used today to provide the Town with a reliable supply of pristine water for culinary, domestic and irrigation needs. A booster station was eventually added to this gravity spring line to provide municipal class distribution pressure to the Town. A second well was added in 1956, followed by a third in 1965. In 2001 the Farmstead wells, within the newly developed Farmstead Subdivision were drilled and placed into service to meet the growing demands of the city. In 2006 the Pioneer Crossing well was drilled and completed. Unfortunately, due to water right issues neither the Pioneer Crossing nor Farmstead wells can be used to meet the day to day water needs of customers. The combination of water right problems and growth has adversely affected Manhattan's ability to meet State requirements for fire protection. Because of the lack of system storage the Town is unable to meet the fire flow requirements of DEQ and will not be able to fight a commercial class fire in the business district of Town.

Problem – The Town of Manhattan identified the following deficiencies:

- ☐ Lack of any water storage.
- ☐ Inadequate fire flows through the Town.
- ☐ Lack of pipe network and system redundancy between the north and south pipe grids.
- ☐ Lack of reliable water supply and pressure.
- ☐ Old fire hydrants with insufficient hydrant valving and substandard isolation valving.
- ☐ Non-compliance with DEQ fire flow requirements.
- ☐ Manual operation of pumping units and standby generators vs. remote or command center SCADA telemetry operation.
- ☐ Pumping units to meet the head requirements of an elevated storage tank.
- ☐ Emergency standby power generation on all pumping units.
- ☐ Active capital improvements program to replace all leaky and substandard water mains.

Proposed Solution – Preliminary engineering report (PER) to study the water system.

Project Status – All grant funds have been expended and the project is 100% complete.

**City of Missoula
Missoula County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Missoula in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
City	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The Airport Interceptor was identified in the 1999 Wastewater Facility Plan as a needed interceptor sewer that should be constructed within a 20-year planning horizon. The Facility Plan determined that the Airport Interceptor was needed to provide capacity relief for the Momont Industrial Park area and to extend sewer service to the Wye Area located to the west. An Interlocal Agreement between the City and Missoula County executed June 25, 2007 regarding the Wye Area sewer project recognized the pending need for the Airport Interceptor sewer.

In addition to providing capacity relief, the project will allow the three existing lift stations to be decommissioned. This will result in significant power cost savings as well as a reduction in maintenance costs.

Problem – The City of Missoula identified the following deficiencies:

- ❑ Existing infrastructure unequipped to handle existing and future demand.

Proposed Solution – Preliminary engineering report (PER) to study new wastewater pipeline and the construction of a new interceptor for the City of Missoula.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Missoula County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Missoula County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
County	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The bridge in question (along Riverview Drive in Seeley Lake) is considered functionally obsolete and is only one lane. It has a sufficiency rating of 39.7 and is in need of replacement. It currently serves a considerable population and represents the only way in and out for most along this route. The structure weight is currently restricted.

Problem – Missoula County identified the following deficiencies:

- ☐ The Riverview Drive bridge is functionally obsolete and in need of replacement.

Proposed Solution – Preliminary engineering report (PER) to study improvements to the Riverview Drive bridge in Missoula County.

Project Status – All grant funds have been expended and the project is 100% complete.

Missoula County on behalf of the unincorporated community of Seeley Lake
Missoula County
TSEP Planning Grant
2013 Biennium

Commerce awarded a TSEP Planning Grant to Missoula County on behalf of the unincorporated community of Seeley Lake in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
County	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – Currently there is no wastewater system in place. For years the unincorporated community of Seeley Lake has been attempting to develop and implement a comprehensive sanitary collection and treatment facility. Because of citizens concerns, Missoula County has reached out to Seeley Lake Sewer District with an offer to assist them with the project. After consideration, the District accepted Missoula County's offer.

Problem – The unincorporated community of Seeley Lake and Missoula County identified the following deficiencies:

- ☐ No central wastewater system has resulted in groundwater contamination.
- ☐ The proposed location of the future treatment plant and method of effluent disposal are no longer viable.

Proposed Solution –Preliminary engineering report (PER) to study the site location for a future treatment plan and methods of wastewater disposal for the unincorporated community of Seeley Lake.

Project Status – All grant funds have been expended and the project is 100% complete.

**Town of Moore
Fergus County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Moore in the amount of \$15,000.

Funding Source	Type of Funds	Award Amount	% of Project
Commerce	TSEP Planning Grant	\$15,000	37.5%
Town	Local match	\$15,000	37.5%
DNRC	RRGL Grant	\$10,000	25%
Total Project Cost		\$40,000	

Project Summary

History – Moore is an incorporated community of approximately 180 people with local businesses and public schools facilities. Moore's wastewater system consists of a gravity collection system and a facultative lagoon system for treatment, which utilizes irrigation to dispose of effluent.

The two-cell facultative lagoon and collection system were constructed in 1985. Sloughing and settling of the subgrade have led to severe degradation of the existing lagoon liner causing leakage from the lagoons. Irrigation from the lagoons has been reduced from four weeks to only four days a year due to the severity of the leakage.

Problem – The Town of Moore identified the following deficiency:

- ❑ Moore's lagoon system is inadequately sized according to MDEQ regulations and the lagoons may be leaking due to a decrease in land application.

Proposed Solution – Preliminary engineering report (PER) to study a wastewater treatment and disposal rehabilitation project in Moore.

Project Status – All grant funds have been expended and the project is 100% complete.

**Town of Pinesdale
Ravalli County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Pinesdale in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
Town	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The existing treatment process had not been adequate at removing turbidity during periods of high runoff. The Town of Pinesdale is currently under an administrative order from the US Environmental Protection Agency (EPA) for violations with the National Primary Drinking Water Regulations (NPDWRs). Specifically, the Town failed to ensure that the turbidity of the system's combined effluent did not exceed 1 Nephelometric Turbidity Unit (NTU). The turbidity of the water exceeded 1 NTU 22.58% of the time in March 2009 and 75% of the time in April 2009. The Town recently exceeded the maximum contaminant limit (MCL) of 60-ug/L for the total regulated haloacetic acids.

Problem – The Town of Pinesdale identified the following deficiencies:

- ❑ Compliance issues that need to be resolved to meet regulatory requirements.

Proposed Solution – Preliminary engineering report (PER) to study the water treatment facility.

Project Status – All grant funds have been expended and the project is 100% complete.

**Town of Plevna
Fallon County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Plevna in the amount of \$15,000.

Funding Source	Type of Funds	Award Amount	% of Project
Commerce	TSEP Planning Grant	\$15,000	37.5% of Project
Town of Plevna	Local match	\$15,000	37.5% of Project
DNRC	RRGL Grant	\$10,000	25 % of Project
Total Project Cost		\$40,000	

Project Summary

History – The town of Plevna's water system consists of two (2) wells. The wells were drilled in 1960 and 1974, respectively. The water is treated with Azone 15 and pumped into a 36,000 gallon concrete in-ground storage tank. Water distribution lines are 1.5 inches and 2 inches in diameter.

Problem – The town of Plevna identified the following deficiencies:

- ☐ The storage tank leaks and only holds approximately 10,000 gallons;
- ☐ Water lines are too small for adequate pressure and volume.

Proposed Solution – Preliminary engineering report (PER) to study the water system in Plevna.

Project Status – All grant funds have been expended and the project is 100% complete.

**City of Polson
Lake County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Polson in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
Polson	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The City of Polson’s wastewater treatment system has an existing lagoon system expected to reach hydraulic capacity within the next five (5) years. Additionally, a new wastewater treatment facility will likely be required to treat effluent to more stringent levels and include ammonia removal. The system discharge is currently regulated by the Environmental Protection Agency (EPA) and the Tribal Water Quality Regulations.

Problem – The City of Polson identified the following deficiencies:

- ❑ The existing lagoon is projected to reach hydraulic capacity in the next five (5) years.

Proposed Solution – Preliminary engineering report (PER) to study lagoon replacement for the City of Polson’s wastewater treatment system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**Ravalli County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Ravalli County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$14,955.03	50% of Project
County	Local match	\$14,955.02	50% of Project
Project Total		\$29,910.05	
Amount to Revert		\$44.97	

Project Summary

History – Ravalli County has 103 bridges to maintain throughout the county, a large number for a single county. Of those bridges, only 43 are inspected by the Montana Department of Transportation (MDT), leaving the remaining 60 for the county to inspect. In an effort to maintain public health and safety for county bridges, Ravalli County utilized 2007 and 2009 TSEP Planning Grant funds to complete an inventory of county bridges. The inventory included mapping bridge locations and ranking county bridges to determine the most critical structures.

Problem – Ravalli County identified the following deficiencies:

- ❑ Aging infrastructure and need to update existing county bridge inventory.

Proposed Solution –Preliminary engineering report (PER) to study to identify the highest priority bridges and culverts in Ravalli County.

Project Status – All grant funds have been expended and the project is 100% complete; \$44.97 in grant funding will revert to the Department.

**Gallatin County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Riverside County Water and Sewer District in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
District	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The Riverside wastewater system was constructed in 1975 and consists of a lagoon system and spray irrigation on the golf course. The Montana Department of Environmental Quality performed an inspection of the facility in 2011 and identified problems with the system needing to be addressed.

Problem – The Riverside Water & Sewer District identified the following deficiencies:

- ❑ Indication upon inspection that wastewater has never been held in the holding cell, suggesting probable leakage;
- ❑ Only one functional aerator in the first lagoon cell and/or a break in the aeration line;
- ❑ Heavy cattail and vegetative growth inside the dikes and presence of rodent holes further indicate issues with lagoon liner.

Proposed Solution –Preliminary engineering report (PER) to study the Riverside Water and Sewer District's wastewater treatment system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**City of Roundup
Musselshell County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Roundup in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$7,500	50% of Project
Roundup	Local match	\$7,500	50% of Project
Project Total		\$15,000	

Project Summary

History – The City of Roundup's original distribution system was installed in 1908 and comprised chiefly of cast iron pipe, which was in prevalent use at that time. Despite numerous pipeline additions and replacement over the years, over 45,000 lineal feet of the original 100 year old cast iron pipe remains in use. This pipe has badly deteriorated over time and City personnel repair an average of 2-3 leaks per month. In addition, over half the remaining cast iron pipe is only 4" in diameter. This large amount of small diameter pipe throughout the distribution system limits the City's ability to provide adequate fire protection to the community or meet minimum pressure and flow requirements outlined in Montana's DEQ *Circular 1: Standards for Waterworks*. The city prepared a comprehensive PER in 2010 that recommended a phased approach to dealing with the system's numerous deficiencies. The city utilized the PER to successfully obtain grants from DNRC's RRGL program, and the Montana Coal Board is currently completing final design elements for the Phase I Water System Improvements. Phase I improvements are tentatively scheduled for construction in the late fall and winter of 2011 and 2012.

Problem – The City of Roundup identified the following deficiencies:

- ☐ Existing system currently cannot meet minimum pressure and flow requirements;
- ☐ Existing cast iron pipe has badly deteriorated over the past century.

Proposed Solution –Preliminary engineering report (PER) to update existing PER (2010) and to study the City of Roundup's water system.

Project Status – All grant funds have been expended and the project is 100% complete.

**City of Shelby
Toole County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Shelby in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
City	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The extent of the City's existing storm water system is minimal. The City's Capital Improvement Plan indicates that additional storm water infrastructure is needed to comply with the Department of Environmental Quality's standards.

Problem – The City of Shelby identified the following deficiencies:

- ❑ Existing infrastructure does not comply with the Department of Environmental Quality's storm drainage standards.

Proposed Solution – Preliminary engineering report (PER) to study the storm sewer system.

Project Status – All grant funds have been expended and the project is 100% complete.

**City of Sidney
Richland County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Sidney in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	37.5% of Project
City	Local match	\$15,000	37.5% of Project
DNRC	RRGL	\$10,000	25% of Project
Project Total		\$40,000	

Project Summary

History – The Sidney wastewater treatment facility was constructed in 1960. The facility consists of a two-cell facility. The primary cell is for BOD reduction and sludge storage. The second cell is operated as an infiltration/evaporation cell. The original facility was designed for a population of 12,000, and although current population estimates are around 6,000 people, the existing treatment process does not meet current design standards.

Problem – The City of Sidney identified the following deficiencies:

- ☐ The facility does not meet current design standards or discharge requirements;
- ☐ The Yellowstone River is presently migrating toward the existing facility, which will ultimately impact the current wastewater facility.

Proposed Solution –Preliminary engineering report (PER) to study modifications to the City of Sidney's wastewater treatment facilities.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**South Wind County Water and Sewer District
Cascade County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the South Wind County Water and Sewer District in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Neighborworks MT	Loan	\$35,000	58% of Project
Commerce	TSEP Planning Grant	\$15,000	25% of Project
DNRC	RRGL	\$10,000	17% of Project
Project Total		\$60,000	

Project Summary

History – Trailer Terrace has a long history of water and wastewater problems, including a 2012 finding of elevated arsenic levels. Flow tests indicate there is 16,000 gallons of water currently being pumped from the well and only 4,000 gallons going to the lagoon during the same period. A violation letter was issued by the Montana Department of Environmental Quality on April 30th, 2012.

Problem – The South Wind Terrace Water & Sewer District has identified the following deficiencies:

- ☐ Elevated arsenic levels in the water supply;
- ☐ Inefficiencies of the wastewater system.

Proposed Solution – Preliminary engineering report (PER) to study water and wastewater at Trailer Terrace in Great Falls, MT.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete. However, work product appears to be complete as a PER was submitted as part of a TSEP construction grant application in May of 2012.

**Town of Stevensville
Ravalli County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Stevensville in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Town	Local match	\$20,000	57% of Project
Commerce	TSEP Planning Grant	\$15,000	43% of Project
Project Total		\$35,000	

Project Summary

History – The facility was originally operated as a controlled discharge lagoon. In 1979 a mechanical treatment plant was constructed. The mechanical treatment plant included manual screening, effluent flow measurement, biological treatment in an oxidation ditch, final sedimentation, aerobic solids digestion and solids storage/dewatering in sludge drying beds. In 1998 major improvements to the facility were constructed, including new secondary clarification units, new aerobic digestion facility and blower building complex and additional sludge beds. In 2011 permit required improvements were constructed including a new ultra-violet light disinfection facility, additional drying beds, polishing pond decommissioning and new effluent flow metering.

Problem – The Town of Stevensville identified the following deficiencies:

- ☐ Existing facility does not have adequate screening or grit removal, and grit is causing frequent equipment failure;
- ☐ The oxidation ditch is 32 years old and at the end of its useful life;
- ☐ The existing facility is unable to meet new MPDES discharge limits anticipated.

Proposed Solution –Preliminary engineering report (PER) to study wastewater treatment plant improvements in the Town of Stevensville.

Project Status – All grant funds have been expended and the project is 100% complete.

**Stillwater County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Stillwater County in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
Stillwater County	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – Stillwater County is responsible for maintaining 43 bridges. The County has replaced or repaired 56 bridges since 1995, including 13 through the assistance of TSEP. Many of these bridges were replaced with culverts reducing maintenance costs.

Problem – Stillwater County identified the following deficiencies:

- ❑ Due to funding shortfalls the County is unable to fund the necessary repairs and replacements to their bridge infrastructure within a reasonable timeframe

Proposed Solution – Preliminary engineering report (PER) to update the County's bridge inventory, inspect the most deficient bridges and prioritize repair or replacement of bridges most in need of repair.

Project Status – All grant funds have been expended and the project is 100% complete.

**Sweet Grass County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Sweet Grass County in the amount of \$15,000.

Funding Source	Type of Funds	Award Amount	% of Project
Commerce	TSEP Planning Grant	\$15,000	50%
County	Local match	\$15,000	50%
Total Project Cost		\$30,000	

Project Summary

History – Sweet Grass County is responsible for the maintenance of 74 bridges including 42 minor bridges and 32 major bridges, as defined by MDT. The county has replaced 77 bridges since 1997, including 8 through the assistance of the TSEP program.

Problem – Sweet Grass County identified the following deficiency:

- ❑ Deteriorating bridge infrastructure and statutory requirement to maintain all public bridges, except those maintained by the Montana Department of Transportation.

Proposed Solution – Update of Sweet Grass County's Bridge Inventory.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete.

**City of Three Forks
Gallatin County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of Three Forks in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
City	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The City of Three Forks has a public water system located within the city limits, consisting of nine (9) groundwater supply wells, distribution piping an arsenic treatment plant (for one water supply), chlorine treatment at each active well, and groundwater storage tanks. A few of the wells have been abandoned because they do not provide reliable water or are not in ideal locations. Of the nine existing wells only five are active and all have problems with water quality and quantity.

Problem – The City of Three Forks identified the following deficiencies:

- ☐ Problems with water quality and quantity with existing water well sources;
- ☐ High concentrations of sulfur, sodium and total dissolved solids found in water supply from Jefferson formation;
- ☐ Formations of concentrations of arsenic in water supply from Madison formation;

Proposed Solution – Preliminary engineering report (PER) to determine a new water source and possible water treatment system for the City of Three Forks.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete. However, work product appears to be complete as a PER was submitted as part of a TSEP construction grant application in May of 2012.

**Town of Valier
Pondera County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to Town of Valier in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Town	Local match	\$32,947.09	57% of Project
Commerce	TSEP Planning Grant	\$15,000.00	26% of Project
DNRC	RRGL Grant	\$10,000.00	17% of Project
Project Total		\$57,947.09	

Project Summary

History – The Town of Valier, with a current estimated population of 452, is located on Montana State Highway 44 in central Pondera County. The incorporated community provides both water/supply distribution and sanitary sewer collection/treatment services with respective utility systems. The Town of Valier has the legal jurisdiction and authority to construct, finance, operate and maintain its utility systems. The oldest parts of the sanitary sewer collection system were installed just over 100 years ago in the 1908 to 1910 timeframe. Pipe material for the oldest mains consists of vitrified clay pipe (VCP). There is also 14,000 LF of 4 inch and 6 inch pipe, less than the required minimum of 8 inch pipe.

Problem – The Town of Valier identified the following deficiencies:

- ❑ Discharge quality has exceeded the allowed permit levels with increasing frequency over the past several months. There were 22 BOD exceedances between May 2007 and July 2010, and 6 TSS exceedances between March 2008 and June 2009.

Proposed Solution – Preliminary engineering report (PER) to study the wastewater system.

Project Status – All grant funds have been expended and the project is 100% complete.

**City of White Sulphur Springs
Meagher County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the City of White Sulphur Springs in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
DNRC	RRGL Grant	\$20,000	40% of Project
Commerce	TSEP Planning Grant	\$15,000	30% of Project
City	Local match	\$15,000	30% of Project
Project Total		\$50,000	

Project Summary

History – The City of White Sulphur Springs was issued an Administrative Order on Consent (WQ-10-27) detailing compliance issues with its existing wastewater treatment system.

Problem – The City of White Sulphur Springs identified the following deficiencies:

- ☐ Wastewater system is currently exceeding effluent limits;
- ☐ Wastewater system has violated discharge monitoring report requirements (DMRs);
- ☐ Failure to comply with existing permit requirements and conditions.

Proposed Solution – Preliminary engineering report (PER) to study the City of White Sulphur Springs wastewater treatment system to correct deficiencies and address the violations identified by AOC.

Project Status – All grant funds have been expended and the project is 100% complete.

**Town of Winifred
Fergus County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Winifred in the amount of \$15,000.

Funding Source	Type of Funds	Award Amount	% of Project
Commerce	TSEP Planning Grant	\$15,000	50%
Town	Local match	\$15,000	50%
Total Project Cost		\$30,000	

Project Summary

History – Winifred operates a single cell, facultative discharging lagoon that was constructed when the original collection system was installed. The lagoon is located approximately 0.25 miles northeast of Winifred. The original design was a 2.5 acre pond with an average depth of 5 feet. The lagoon currently operates at six feet deep with 2.4 feet of freeboard. The original Dog Creek channel was relocated east to allow for construction of the lagoon. A side channel remains north of the pond wherein wastewater discharges through an overflow structure, eventually seeping into the ground and surface flowing to Dog Creek. The facility was designed as a non-discharging system and therefore no permit was issued until 2006. Historical records indicate that the lagoon has discharged on an interim basis for at least the past 30 years.

No major improvements have been implemented at the treatment facility since its original construction. An inspection by MDEQ in 2005 identified a number of operational and maintenance issues. Since that time, collection system improvements were prioritized and implemented in 2009 so as to reduce inflow and infiltration, but no improvements were made to the lagoon. A more recent inspection by MDEQ was completed in April of 2012. The report highlighted the findings in 2005 and also included comments regarding the lagoon's inability to meet its current discharge permit. As a result of the 2012 inspection, MDEQ has issued a draft Administrative Order of Consent (AOC) in regards to the violations of discharge limits associated with BOD5 and TSS. The status of this document remains pending. The community is currently in the process of renewing its discharge permit with MDEQ, set to expire in July of 2011.

Problem – The Town of Winifred identified the following deficiency:

- ❑ Winifred's lagoon system is at the end of its useful life cycle and is in need of a major overhaul as well as sludge removal project or replacement and rehabilitation.

Proposed Solution – Preliminary engineering report (PER) to study a wastewater treatment and disposal rehabilitation project in Winifred.

Project Status – All grant funds have been expended and the project is 100% complete.

**Town of Winnett
Petroleum County
TSEP Planning Grant
2013 Biennium**

Commerce awarded a TSEP Planning Grant to the Town of Winnett in the amount of \$15,000.

Project Funding

Funding Source	Type of Funds Being Used	Amount	Project %
Commerce	TSEP Planning Grant	\$15,000	50% of Project
Town	Local match	\$15,000	50% of Project
Project Total		\$30,000	

Project Summary

History – The majority of the Town of Winnett's existing sanitary sewer system was constructed in 1922, according to a wastewater & sanitary sewer deficiency study conducted by Morrison-Maierle in 1992. Additions to the system have been made over the years, with an addition being constructed in 1969 and the most recent in 1993. Winnett's wastewater treatment facility is a three celled aerated lagoon system. Typical operation is with the cells in series, although parallel operation is an option. The facility was designed so any cell could be bypassed. Cells are lined with one foot of clay and each has an operation depth of 8 feet. Flow between cells or discharge out at the effluent structure are controlled using redwood stop blocks. The system was designed for a population of 318 and the current population is estimated at 188 residents.

Problem – The Town of Winnett identified the following deficiencies:

- ❑ Lagoons are discharging insufficiently treated effluent into McDonald Creek.
- ❑ Community is required to retain an engineer to address ammonia and disinfection.
- ❑ Maximum daily flows (discharge from lagoon) are reported to be 119,000 gpd; based on a population of 188. The discharge corresponds to 633 gpcd, more than six times what is considered a reasonable per capita flow rate.
- ❑ The existing system cannot adequately treat BOD, TSS, Fecal Coliforms, Ammonia or Nutrients (TP and TN) to meet current and impending discharge permit limits.
- ❑ Current pollutant loads to the receiving stream (McDonald Creek) are levels harmful to human contact.

Proposed Solution – Preliminary engineering report (PER) to study the wastewater collection, treatment and disposal system.

Project Status – As of November 15th, 2012, no grant funds have been expended and the project is 0% complete. However, work product appears to be complete as a PER was submitted as part of a TSEP construction grant application in May of 2012.

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2013 Biennium TSEP Project Grants

With the passage of HB 351 (Chapter 389, Laws 2011), the Legislature provided for an initial appropriation to Commerce of \$14,753,578 dollars, plus any additional unexpended funds from a statutory debt service appropriation, to fund local government infrastructure planning, emergency, and project activities through the TSEP Program during the 2013 biennium.

From that appropriation, \$900,000 was allocated to infrastructure planning grants, \$100,000 to emergency grants, and the remainder to project grants. Commerce received 59 applications requesting approximately \$31 million in TSEP project grant aid. Staff reviewed and ranked the applications based on the criteria set forth in the TSEP Application Guidelines, and prioritized the applications as forth in Section 90-6-710, MCA.

The Legislature awarded a total of \$13,753,578 to 30 local governments. As of November 15, 2012, an additional \$1,668,239 in unexpended debt service funds and reverted project funds have been reallocated to fund 3 projects conditionally approved by the Legislature in HB 351. The projects include 13 bridges, 10 wastewater projects, 9 water projects, and one solid waste project. As of December 15, 2012, two of the 2013 Biennium project grants have been completed and closed out.

In accordance with the language of HB 351, Commerce must report on those 2013 Biennium project grants that have not met start-up conditions by January 1, 2013. The Legislature must review those projects to determine if the authorized grant should be withdrawn. As of December, 2012, 9 of the 2013 Biennium project grants have not met start-up conditions. Those projects are identified at the end of this section, with a recommendation for whether the Legislature should withdraw the grant.

Individual score sheets for applications and summaries for applications not awarded project grants in the 2013 biennium are available upon request.

2013 BIENNIUM TSEP PROJECT GRANT AWARDS

Rank	Grantee	County	Project Type	Approved Grant Amount
1	Hardin, City of	Big Horn	Water	\$500,000
2	Park County	Park	Bridge	\$555,626
3	Sheridan, Town of	Madison	Wastewater	\$750,000
4	Yellowstone County	Yellowstone	Bridge	\$157,227
5	Madison County	Madison	Bridge	\$699,931
6	Brady County W&S District	Pondera	Water	\$750,000
7	Carter Choteau County W&S District	Choteau	Water	\$750,000
8	Sun Prairie Village Co. W&S District	Cascade	Water	\$625,000
9	Sweet Grass County	Sweet Grass	Bridge	\$156,678
10	Beaverhead County	Beaverhead	Bridge	\$426,941
11	Carbon County	Carbon	Bridge	\$406,695
12	Jefferson County	Jefferson	Bridge	\$218,634
13	Hebgen Lake Estates County W&S District	Gallatin	Wastewater	\$720,000
14	Augusta W&S District	Lewis & Clark	Wastewater	\$295,000
15	Gallatin Gateway County W&S District	Gallatin	Wastewater	\$750,000
16	Fergus County	Fergus	Bridge	\$276,157
17	Melrose W&S District	Butte-Silver Bow	Wastewater	\$162,000
18	Blaine County	Blaine	Bridge	\$434,309
19	Deer Lodge, City of	Powell	Wastewater	\$500,000
20	Lincoln County	Lincoln	Bridge	\$287,827
21	West Yellowstone/Hebgen Basin Refuse Disposal Dist.	Gallatin	Solid Waste	\$246,563
22	Eureka, Town of	Lincoln	Wastewater	\$625,000
23	Fairfield, Town of	Teton	Water	\$500,000
24	Ravalli County	Ravalli	Bridge	\$142,616
25	Granite County	Granite	Bridge	\$276,408
26	Roundup, City of	Musselshell	Water	\$500,000
27	Roberts - Carbon Co. W&S District	Carbon	Wastewater	\$500,000
28	Lockwood W&S District	Yellowstone	Wastewater	\$750,000
29	North Havre County Water District	Hill	Water	\$590,000
30	Sand Coulee Water District	Cascade	Water	\$200,966
31	East Helena, City of	Lewis & Clark	Wastewater	\$750,000
32	Bigfork W&S District	Flathead	Water	\$750,000
33	Custer County	Custer	Wastewater	\$750,000
34	Crow Tribe for Crow Agency	Big Horn	Water	\$750,000
35	Hill County	Hill	Bridge	\$174,082
36	Polson, City of	Lake	Water	\$625,000

2013 Biennium TSEP Project Grants – *Start-Up Conditions Not Met*

In accordance with the language of HB 351, Commerce must report on those 2013 Biennium project grants that have not met start-up conditions by January 1, 2013. The Legislature must review those projects to determine if the authorized grant should be withdrawn. As of December 1, 2012, the following 2013 Biennium project grants have not met start-up conditions.

**Madison County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 4,022 points out of a possible 5,000 points and ranked 5th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Madison County for the 2013 Biennium in the amount of \$699,931.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 699,931	Grant awarded
County	Cash	\$ 699,931	Committed by resolution, partially expended on PER
Project Total		\$1,399,862	

Median Household Income:	\$30,233	Total Population:	6,851
Percent Non-TSEP Matching Funds:	50%	Number of Households:	4,671

Project Summary

History – Madison County has identified one bridge that is in critical condition and in need of replacement. The Blaine Spring Bridge is located eight miles south of the Town of Ennis across Blaine Spring Creek. The 125-foot bridge is a one-lane, single-span steel truss structure constructed in 1897. Varney Road serves as access mostly for recreationists, but also for numerous residences, area ranchers and the Ennis National Fish Hatchery. The road serves as school bus, mail, and garbage route. Traffic volume is estimated to be 290 vehicles per day. The bridge is posted at eight tons. Closure of the bridge would result in a 23-mile detour from one side of the bridge to the other side.

Problem – The bridge has a sufficiency rating of 31.7. Deficiencies include:

- ☐ truss is made of mild steel and showing signs of heavy corrosion,
- ☐ timber stringers and decking are exhibiting heavy checking and rotation indicating that they are undersized,
- ☐ bearings are rusted and covered with debris,
- ☐ bridge is listed as fracture critical,
- ☐ concrete substructure shows signs of deterioration including rock pockets, cracking, spalling and delamination, and
- ☐ 14-foot wide bridge is narrow and does not conform to the county's bridge standards.

Proposed Solution – The proposed project would replace the bridge with a new steel truss superstructure.

Project Status – An email from Commissioner Jim Hart states the county anticipates to meet start-up conditions by December 31, 2012. As of November 15, 2012 the County has not met start up conditions.

**Augusta Water & Sewer District
Lewis and Clark County
Wastewater System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,800 points out of a possible 5,000 points and ranked 14th out of 59 for funding in the 2013 biennium. **The Legislature awarded a TSEP Project Grant to Augusta Water & Sewer District for the 2013 Biennium in the amount of \$295,000.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$295,000	Grant awarded
SRF	Loan	\$316,000	Loan approved
DNRC	RRGL Grant	\$100,000	Not awarded
Project Total		\$611,000	

Median Household Income:	\$24,688	Total Population:	300
Percent Non-TSEP Matching Funds:	50%	Number of Households:	142

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	NA	-	Target Rate:	\$18.52	-
Existing Wastewater Rate:	\$17.75	96%	Rate With Proposed TSEP Assistance:	\$21.21	115%
Existing Combined Rate:	NA	-	Rate Without TSEP Assistance:	\$26.46	143%

Project Summary

History – The wastewater system in the unincorporated community of Augusta was constructed after the formation of a rural improvement district (RID) in the early 1960s. The collection system is composed of approximately 13,000 feet of eight-inch and approximately 1,200 feet of 12-inch clay tile pipe, and 44 manholes, most of which are pre-cast concrete. Due to a leaking lagoon, a water and sewer district was formed in 1997, and a new total retention lagoon treatment facility was constructed. Approximately 7,000 feet of new outfall line was installed from the collection system out to the new treatment facility, and approximately 10,000 feet or 75% of the existing collection system was replaced. Residents are served by individual wells.

Problem – The wastewater system has the following deficiencies:

- ☐ sewers mains with collapsed sections, cracked and broken pipes, inadequate slopes, and sags, and
- ☐ backups of sewage into residences and businesses.

Solution - The project would:

- ☐ replace or install approximately 3,600 feet of sewer mains,
- ☐ install approximately 12 new manholes, and
- ☐ re-connect approximately 50 service lines.

Project Status – As of November 15, 2012 the project has not met start up conditions.

**Fergus County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,772 points out of a possible 5,000 points and ranked 16th out of 59 application. **The Legislature awarded a TSEP Project Grant to Fergus County for the 2013 Biennium in the amount of \$276,157.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 77,342	Grant awarded
County	Cash	\$ 77,342	Committed by resolution, partially expended on PER
Project Total		\$154,684	

Median Household Income:	\$30,409	Total Population:	11,496
Percent Non-TSEP Matching Funds:	50%	Number of Households:	4,860

Project Summary

History – Fergus County has identified three bridges that are in critical condition and in need of replacement.

- ❑ Ployhar Road Bridge crosses Coyote Creek approximately six miles southwest of the Town of Denton. The 16-foot bridge is a single-span, timber structure constructed in 1976. The road provides access to a number of farms and ranches in the area, and the grain elevator located in Moccasin. Traffic volume is estimated to be 30 to 35 vehicles per day. The bridge is not posted. Closure of the bridge would result in a 10-mile detour from one side of the bridge to the other side.
- ❑ Paradise Road Bridge crosses Dog Creek approximately one mile west of the Town of Winifred. The 17-foot bridge is a single-span timber structure constructed in 1983. The road provides access to a number of farms and ranches in the area. In addition, this road has been used by natural gas exploration companies. Traffic volume is estimated to be 20 to 30 vehicles per day. The bridge is not posted. Closure of the bridge would result in a 13-mile detour from one side of the bridge to the other side.
- ❑ Kendall Road Bridge crosses Bull Creek approximately 0.25 miles west of the community of Hilger. The 16-foot bridge is a single-span timber structure constructed in 1976. The road provides access to a number of farms and ranches in the area, as well as the Historic Kendall Mine and a local camp. Traffic volume is estimated to be 25 to 30 vehicles per day. The bridge is posted at 13 tons. Closure of the bridge would result in a 13-mile detour from one side of the bridge to the other side.

Problem – The three bridges have the following deficiencies.

- ❑ The Ployhar Road Bridge has a sufficiency rating of 39.7. Deficiencies include: bridge and approaches lack railing and end treatments; timber girders have cracking throughout and crushing at bearing points; timber backwalls have significant fill pressure, with fill material sifting through backwall planks; timber wingwalls are failing; rotation and crushing of timber caps; timber running planks are worn and cracking; and the load restriction precludes the use of the bridge by some farm and commercial vehicles.
- ❑ The Paradise Road Bridge has a sufficiency rating of 39.8. Deficiencies include: bridge and approaches lack railing and end treatments; timber girders have significant cracking and crushing at bearing point; timber backwalls are bulging and pushing on piles, and have areas of cracking and rot; timber wingwalls are failing; timber running planks are worn and cracking; and the load restriction precludes the use of the bridge by some farm and commercial vehicles.
- ❑ The Kendall Road Bridge has a sufficiency rating of 44.5. Deficiencies include: bridge and approaches lack railing and end treatments; timber girders have significant cracking; timber cap on east abutment has significant crushing; timber backwalls and bulging and pushing on piles, have areas of cracking and rot; timber wingwalls are failing; timber running planks are worn and cracking; and the load restriction precludes the use of the bridge by some farm and commercial vehicles.

Solution – The project would replace all three bridges with aluminum box culverts.

Project Status – On October 17, 2012, TSEP received a letter from the County requesting a reduction in the scope of work to replace the Kendall Road Bridge only. The reduction in scope will reduce the funding award to \$77,342, leaving \$198,815 to fund conditional awarded project. As of November 15, 2012 no start-up conditions have been met, but it is anticipated that all conditions will be met by December 31, 2012.

**Brady County Water & Sewer District
Pondera County
Water System Improvements
TSEP Project Grants
2013 Biennium**

This application received 4,010 points out of a possible 5,000 points and ranked 6th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Brady County Water & Sewer District for the 2013 Biennium in the amount of \$750,000.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 750,000	Grant awarded
Commerce	CDBG Grant	\$ 450,000	Grant awarded
USDA	RD Grant	\$ 1,540,000	Grant awarded
USDA	RD Loan	\$ 400,000	Loan approved
Project Total		\$3,140,000	

Median Household Income:	\$26,858	Total Population:	173
Percent Non-TSEP Matching Funds:	55%	Number of Households:	81

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$50.00	-	Target Rate:	\$51.48	-
Existing Wastewater Rate:	\$38.00	-	Rate With Proposed TSEP Assistance:	\$111.45	216%
Existing Combined Rate:	\$88.00	171%	Rate Without TSEP Assistance:	\$143.38	279%

Project Summary

History – The water system in the Brady consists of distribution mains constructed in 1948, a water storage tank constructed in 1949, and a treatment plant constructed in 1993. The conventional type treatment plant consists of rapid mix, flocculation, clarification, filtration, and chlorine disinfection. The Brady County Water District was created in 1993 and re-formed as a county water and sewer district in 2003 when it also took over the wastewater system. The district is under an administrative order on consent for exceeding the maximum contaminant levels (MCL) related to disinfectant by-products. The district has been required to send notices to its users describing the problems and encouraging users to refrain from drinking the water.

Problem – The water system has the following deficiencies:

- ☐ treatment exceeds the MCL's for TTHM and HAA5,
- ☐ system does not comply with rules for cryptosporidium removal, and
- ☐ various equipment issues in the treatment plant that are needed for the plant to run more efficiently.

Solution – The project would:

- ☐ install membrane filtration; ultra violet disinfection; a backflow preventer on the lines between the surface wash arms for the filters and the clearwell and between the process water for the chemical room and the clearwell; flow control valves between the raw water pumps and the two trains; gas chlorination detection alarm for operator safety; a chlorine analyzer that automatically adjusts chlorine levels in the finished water and will shut down the plant if there is a loss of chlorine or insufficient residual to meet the contact time requirements; automated blow-offs for the tube settlers with new solenoid valves; sample pump; auto dialer to alert operator of plant problems; and new chemical metering pumps.
- ☐ automate the treatment plant; and
- ☐ replace clearwell and high service pump level controls; filter controls with new valves and pressure switches; turbidity meters; backwash pump; and turbidity sample pump for #1 filter.

Project Status – The District requested a change in scope on July 8, 2011. TSEP approved the scope change on July 19, 2012 with conditions. No start-up conditions have been met as of November 15, 2012. The district will hold a bond election December 28, 2012. The district anticipates having all start-up conditions met by December 31, 2012 to execute a contract.

**City of Deer Lodge
Powell County
Wastewater System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,715 points out of a possible 5,000 points and ranked 19th out of 59 for funding in the 2013 biennium. **The Legislature awarded a TSEP Project Grant to the City of Deer Lodge for the 2013 Biennium in the amount of \$500,000.**

Funding Source	Type of Funds	Amount	Status of Funds
RD	RD Grant/Loan	\$10,520,796	Awaiting confirmation of award
Commerce	TSEP Grant	\$ 500,000	Awarded, grantee has not met start up
DNRC	RRGL Grant	\$ 100,000	Awarded
City	Cash	\$ 350,000	Status as of October 2012 letter
Project Total		\$11,101,796	

Note: this budget outline was provided to TSEP in October 2012 letter

Median Household Income:	\$29,859	Total Population:	3,421
Percent Non-TSEP Matching Funds:	89%	Number of Households:	1,224

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$33.61	-	Target Rate:	\$57.23	-
Existing Wastewater Rate:	\$15.97	-	Rate With Proposed TSEP Assistance:	\$67.95	119%
Existing Combined Rate:	\$49.58	87%	Rate Without TSEP Assistance:	\$69.69	122%

Project Summary

History – The wastewater treatment facility in Deer Lodge was constructed in 1985. It consists of a three-cell aerated lagoon, one settling cell, and ultraviolet (UV) disinfection. A portion of the collection system was slip lined in 2009. In 1998, as a participant of the voluntary nutrient reduction program, Deer Lodge signed a memorandum of understanding volunteering to reduce summertime nutrient loading into the Clark Fork River by diverting 100% of their wastewater effluent to land application. The city's current discharge permit requires zero discharge of total nitrogen and total phosphorus to the river from June 21 through September 21. In 2000, the city constructed a land application system on the Grant Kohrs Ranch National Historic Site adjacent to the treatment facility.

Problem – The wastewater system has the following deficiencies:

- ❑ The Grant Kohrs Ranch has informed the city that the land application system will no longer be allowed to be used after the 2010 season, and there are no alternate land application sites available at or adjacent to the treatment plant,
- ❑ UV disinfection system is at the end of its service life, with only one of two units currently operating,
- ❑ cell four is unlined and most likely a source of some infiltration into the plant,
- ❑ lagoon only provides 14 days of storage instead of the required 20 days,
- ❑ approximately four feet of sludge in cell one,
- ❑ treatment plant cannot meet the existing biochemical oxygen demand (BOD) and total suspended solids (TSS) removal requirements,
- ❑ four permit violations for E. coli in the past two years,
- ❑ treatment plant cannot meet the anticipated ammonia limits required in 2011 permit, and
- ❑ collection system has an excessive amount of inflow and infiltration (I&I), estimated at 550 gallons per capita per day during summertime peaks.

Solution – The project would: install larger land application pumps at the treatment plant; new UV disinfection equipment at the treatment plant; new lift station and new force main to convey effluent to new land application site; new center pivot(s) on approximately 200 acres; and construct a new storage basin.

Project Status – As of a letter dated October 16, 2012, from Mayor Fraley, he indicates the town intends to meet start-up conditions, but has not done so as of November 15, 2012. The City is working with its accountant to finalize audit reports for the last three years and the environmental process.

**Lincoln County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,674 points out of a possible 5,000 points and ranked 20th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Lincoln County for the 2013 Biennium in the amount of \$287,827.**

Funding Source	Type of Funds	Amount	Status of Funds
TSEP	Grant	\$287,827	Awarded, grantee has not met start up
County	Cash	\$287,828	Committed by resolution, partially expended on PER
Project Total		\$575,655	

Median Household Income:	\$26,754	Total Population:	18,835
Percent Non-TSEP Matching Funds:	50%	Number of Households:	7,764

Project Summary

History – Lincoln County has identified two bridges that are in critical condition and in need of replacement.

- ❑ The Homestead Drive Bridge is located approximately five miles southwest of the Town of Eureka, crossing Pinkham Creek. Originally, the 65-foot single-span bridge was constructed in 1914 and utilized as a railroad bridge. The bridge was salvaged in the 1980s with a concrete sill added to the foundation, and a corrugated metal decking was installed in 2003. The road provides sole access to 20 residences of which 12 are permanent homes. There are two subdivisions in preliminary planning stages. The bridge provides access to state lands and the Kootenai National Forest. Traffic volume is estimated to be 40 vehicles per day. The bridge is posted at 13 tons.
- ❑ The Bethel Drive Bridge is located approximately 15 miles southeast of the City of Troy, crossing onto Angel Island that sits in Bull Lake. The 13-foot long, structure was probably constructed in the 1970s. The road provides sole access to 40 year-round homes, 62 seasonal residences, and 62 undeveloped lots. The road serves as a designated mail, garbage, and school bus route. There is heavy recreation use from boaters and fishermen. Traffic volume is estimated to be 250 vehicles per day. The bridge currently has no posted weight restriction.

Problem – The two bridges have the following deficiencies.

- ❑ The Homestead Drive Bridge has a sufficiency rating of 47.3. Deficiencies include:
 - bridge is considered as fracture critical,
 - girders and floor beams have paint loss with rust, pitting, and minor localized section loss,
 - substructure deficiencies include minor cracking of the concrete abutments,
 - the concrete abutments appear to be undersized, with shallow footing depths,
 - rail is substandard and incapable of absorbing vehicular impacts, and
 - 20-foot wide bridge is narrow and does not conform to the county's bridge standards.
- ❑ The Bethel Drive Bridge has a sufficiency rating of 78.7. Deficiencies include:
 - timber foundation is badly deteriorated with surface rot on 75% of piles,
 - timber caps are suffering from checking, section loss and surface rot,
 - bridge is poorly aligned and constricts the stream, which has resulted in loss of riprap,
 - timber stringers are in some places resting directly on the piling and subsequently are settling and moving with the rotation of the piling,
 - asphalt overlay was observed to have fairly substantial transverse cracking at the bridge ends, and
 - lacks rail and approach guardrail.

Solution – The project would:

- ❑ replace the Homestead Drive Bridge with a single-span precast, prestressed, concrete tri-deck beam structure, and
- ❑ replace the Bethel Drive Bridge with a single-span precast, prestressed, concrete tri-deck beam structure.

Project Status –As of November, 15 2012, the County has not responded to an award letter dated April 12, 2012 or an email for update dated July 6, 2012, nor a letter dated September 13, 2012 requesting project status updates.

**Town of Eureka
Lincoln County
Wastewater System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,654 points out of a possible 5,000 points and ranked 22nd out of 59 applications. **The Legislature awarded a TSEP Project Grant to the Town of Eureka for the 2013 Biennium in the amount of \$625,000.**

Funding Source	Type of Funds	Amount	Status of Funds
USDA	RD Loan	\$1,094,000	Application submitted in 2011
Commerce	TSEP Grant	\$ 625,000	Grant awarded
Commerce	CDBG Grant	\$ 450,000	Grant not awarded
USDA	RD Grant	\$ 321,000	Application submitted in 2011
DNRC	RRGL Grant	\$ 100,000	Awarded
Project Total		\$2,140,000	

Median Household Income:	\$27,120	Total Population:	1,387
Percent Non-TSEP Matching Funds:	76%	Number of Households:	573

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$41.93 (Midvale) \$31.50 (Eureka)	-	Target Rate:	\$51.98	-
Existing Wastewater Rate:	\$42.48 (Eureka)	-	Rate With Proposed TSEP Assistance:	\$73.85 (Midvale)	142%
Existing Combined Rate:	NA	-	Rate Without TSEP Assistance:	\$79.43	153%

As a result of the proposed project, the average residential wastewater rate decreases for the town's existing users to \$31.92 because of the additional connections added to the system, which allow expenses to be spread out among a greater number of connections.

Project Summary

History – The proposed project area includes Midvale, which is an unincorporated residential area immediately north of and adjacent to the Town of Eureka, a rural residential area, and a significant commercial corridor along U.S. Highway 93. The area has a water system, but wastewater disposal is accomplished by individual septic tank systems. The town's wastewater treatment system was upgraded in 2003 and has the capacity to serve the proposed project area. The Midvale community would be annexed into the town.

Problem – The lack of a centralized wastewater system in the project area has resulted in the following problems:

- ☐ soils in the areas allow effluent to rapidly seep into the underlying groundwater with minimal treatment,
- ☐ approx.. 90% of the septic systems in the area are 20-30 years old with numerous instances of deteriorated or failing conditions,
- ☐ DEQ has classified the area as medium and high hazard for risk of groundwater contamination due to the density of septic tank/drain field systems,
- ☐ groundwater quality samples show conditions corresponding with an appreciable density of septic tank/drain field systems: nitrate levels are elevated (three-four times higher) compared to immediately adjacent areas, and numerous and repetitive instances of bacteriological contamination of water supply systems in the area; and
- ☐ a portion of the town's piping, the headworks, and the primary wastewater pumps require improvements to properly carry the additional flow.

Solution – The project would:

- ☐ construct approximately 23,000 feet of eight to 10-inch gravity collection lines (a small portion will be served by grinder pumps and small diameter, low-pressure sewer lines due to the lower terrain);
- ☐ replace approximately 1,000 feet of eight-inch piping in the town, and the existing pumps in the town's primary pumping station; and
- ☐ lower the comminutor device in the headworks.

Project Status – As of November 15, 2012 the Town has not met start up conditions. Correspondence with the town October 22, 2012, states CDBG funds were not received. The Town intended on discussing how to proceed with the project at November 12 meeting since CDBG funds were not received.

**Lockwood Water & Sewer District
Yellowstone County
New Wastewater System
TSEP Project Grant
2013 Biennium**

This application received 3,610 points out of a possible 5,000 points and ranked 28th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Lockwood Water & Sewer District for the 2013 Biennium in the amount of \$750,000.**

Funding Source	Type of Funds	Amount	Status of Funds
DEQ	SRF Loan	\$11,603,000	Loan has been approved
Commerce	TSEP Grant	\$ 750,000	Grant awarded
Army Corps	STAG/WRDA Grant	\$ 400,000	Not awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
Project Total		\$12,4530,000	

Median Household Income:	\$37,659	Total Population:	3,220
Percent Non-TSEP Matching Funds:	96%	Number of Households:	1,207

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$30.00	-	Target Rate:	\$72.18	-
Existing Wastewater Rate:	NA	-	Rate With Proposed TSEP Assistance:	\$110.76	153%
Existing Combined Rate:	NA	-	Rate Without TSEP Assistance:	\$114.61	159%

Project Summary

History – While the unincorporated community of Lockwood has a public water system, it relies upon on-site septic systems for disposal of its sewage. The district has started the construction of a sewer collection system that will connect to the City of Billings wastewater treatment plant. Once completed in 2011, the first phase, which is expected to cost \$21 million, will serve 1,150 properties. The proposed project would be the second phase and would expand the collection system to serve an additional 1,207 households.

Problem – The lack of a centralized wastewater system has resulted in the following problems:

- ☐ nitrate levels in the groundwater are high due to the extensive number of septic and drainfield systems,
- ☐ older subdivisions in the community have small lots with limited areas for replacement of drainfield or extension of drainfields in the event of a drainfield failure, and
- ☐ newer developments are required to have large lots that can accommodate lengthy on-site drainfields, which are often expensive pressure-dosed systems due to the limited soil suitability.

Proposed Solution – The proposed project would install approximately 150,000 feet of gravity sewer line to serve 1,207 additional properties.

Project Status – As of November 15, 2012, start-up conditions have not been met. A conference call was held October 29, 2012. A bond election will not be held until mid-January 2013. The district hopes to have all other start-up conditions met by December 31, 2012.

**North Havre County Water District
Hill County
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,600 points out of a possible 5,000 points and ranked 29th out of 59 applications. **The Legislature awarded a TSEP Project Grant to North Havre County Water District for the 2013 Biennium in the amount of \$590,000.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 590,000	Grant awarded
Army Corps	STAG/WRDA Grant	\$ 480,000	Not awarded
USDA	RD Loan	\$ 265,540	Loan approved
USDA	RD Grant	\$ 185,560	Grant awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
District	Cash	\$ 41,250	Committed by resolution, partially expended on PER
Project Total		\$1,182,350	

Median Household Income:	\$27,308	Total Population:	90
Percent Non-TSEP Matching Funds:	50%	Number of Households:	28

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$125.00	392%	Target Rate:	\$31.86	-
Existing Wastewater Rate:	NA	-	Rate With Proposed TSEP Assistance:	\$125.00	392%
Existing Combined Rate:	NA	-	Rate Without TSEP Assistance:	\$185.87	583%

Project Summary

History – The North Havre County Water District was formed in the early 1980s to assume responsibility of the water system built in the 1950s/60s by the U.S. Air Force that provided treated water to a radar base. The system includes a raw water intake on the Fresno Reservoir, a 6-inch transmission pipeline that pumps raw water approximately 20 miles to the treatment plant, a raw water storage pond system, treatment plant, and storage infrastructure. When the district took over the system, it expanded it to include area farmers and ranchers, thereby creating a small regional/rural type water system. Water is gravity-fed to approximately 35 farmers and ranchers in the area, each of whom receive the water into a separate cistern. In 1984, the military returned to the base and assisted the district with improvements to the treatment plant, including the construction of a new building and installation of two additional treatment trains. The district has operated the system since with no major improvements. In 2008, DEQ issued an administrative order against the district citing violation of various requirements. The district was placed under a boil order and began providing bottled water to customers. The administrative order requires that the district disconnect from its surface water supply. An interim service plan has been created, whereby the district will receive treated water from the City of Havre by 2010. The applicant intends to connect to the North Central Montana Regional Water Authority (NCRMWA) to supply its raw water once that system becomes operational.

Problem – The water system has the following deficiencies: failing control panel and SCADA system; various deficiencies at the water treatment plant, including structural integrity issues and an out-dated filtration system; both storage tanks are deteriorating and are sited on land that is not owned by the district; low pressures are experienced in the distribution system, and service meters installed in the early 1980s are in poor condition and difficult to access.

Solution – The project would: renovate the existing facility (re-route the pipeline servicing the bulk fill station; install new motors on existing pumps; replace the heating and ventilation (HVAC) system; remodel office, lab and storage space; and remove all filters and treatment equipment); construct a 100,000 gallon above-ground concrete storage tank; install approximately 15,480 feet of distribution pipeline, along with associated valves and appurtenances, and replace the existing meters with a drive-by, radio read metering system.

Project Status – As of November 15, 2012, the TSEP is waiting for final environmental review approval and funding award letters from RRGL and RD. It is anticipated that all start-up conditions will be met by December 31, 2012.

**Bigfork Water & Sewer District
Flathead County
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,567 points out of a possible 5,000 points and ranked 32nd out of 59 applications. **The Legislature conditionally awarded a TSEP Project Grant to Bigfork Water & Sewer District for the 2013 Biennium in the amount of \$750,000.**

Funding Source	Type of Funds	Amount	Status of Funds
DEQ	SRF Loan	\$1,410,000	Loan approved
Commerce	TSEP Grant	\$ 750,000	Grant awarded
District	Cash	\$ 494,000	Approved by resolution
Project Total		\$2,654,000	

Median Household Income:	36,116	Total Population:	2,530
Percent Non-TSEP Matching Funds:	72%	Number of Households:	1,125

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$33.59	-	Target Rate:	\$69.22	-
Existing Wastewater Rate:	\$84.95	-	Rate With Proposed TSEP Assistance:	\$131.53	190%
Existing Combined Rate:	\$118.54	171%	Rate Without TSEP Assistance:	\$135.32	195%

Project Summary

History – The Bigfork County Water and Sewer District was created in 1984 to serve a portion of the unincorporated community of Bigfork. The existing water system includes two water supply wells, transmission main, distribution piping, three storage reservoirs, booster stations and a pressure reduction station.

Problem – The water system has the following deficiencies:

- ☐ no backup supply well in the event that one of the two existing wells fail,
- ☐ a second transmission main is needed as a backup to the other transmission main from the well to the distribution system, because the current transmission main would not be hydraulically capable of providing the flow from an additional well, and
- ☐ no backup power source at the well house.

Proposed Solution – The proposed project would:

- ☐ install a new water supply well,
- ☐ install a second transmission main from the Ramsfield wells to the Chapman Hill Road, and
- ☐ install backup power at the well house.

Project Status – As of November 15, 2012, the district has met all start-up conditions but TSEP does not have sufficient funds to award to the District.

**City of Polson
Lake County
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,517 points out of a possible 5,000 points and ranked 36th out of 59 applications. **The Legislature conditionally awarded a TSEP Project Grant to the City of Polson for the 2013 Biennium in the amount of \$625,000.**

Funding Source	Type of Funds	Amount	Status of Funds
DEQ	SRF Loan	\$1,689,500	Application and award pending
Commerce	TSEP Grant	\$ 625,000	Grant conditionally awarded
DNRC	RRGL Grant	\$ 100,000	Awarded
Project Total		\$2,414,500	

Median Household Income:	\$21,870	Total Population:	5,546
Percent Non-TSEP Matching Funds:	74%	Number of Households:	2,391

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$26.11	-	Target Rate:	\$41.92	-
Existing Wastewater Rate:	\$28.75	-	Rate With Proposed TSEP Assistance:	\$59.03	141%
Existing Combined Rate:	\$54.86	131%	Rate Without TSEP Assistance:	\$60.77	145%

Project Summary

History – The water system in Polson consists of six groundwater wells, five concrete and two steel storage tanks, booster pumps, and several miles of distribution mains. Treatment includes chlorination, corrosion inhibitors, and an iron removal system. The city relies on several wells and storage reservoirs, but lost a primary water supply source, the Hell Roaring Creek surface water supply in 1994 due to contamination. Since then the city has actively pursued the use of groundwater resources to replace this water supply as well as provide for new growth in the area. A one million-gallon concrete storage tank and two new wells located on the west side of the Flathead River were constructed in 2001. In 2004, the water system on the west side of the Flathead River was connected to the system on the east shore (95% of the residences and businesses) with the construction of a 12-inch PVC and 14-inch PE water line that is lying on the bottom of the Flathead River. The city is currently constructing two 500,000-gallon concrete storage tanks and a radio telemetry control system. Summer lawn watering restrictions have been imposed in attempt to mitigate the problem. A city ordinance, while repealing the water moratorium, places limits on annexation and new water hookups to allow for controlled growth.

Problem – The water system has the following deficiencies:

- ☐ inadequate water supply to meet maximum demand and drought,
- ☐ severe corrosion occurring in a critical water storage tank,
- ☐ potential for negative pressures and cross connections in distribution system, and
- ☐ inadequate fire flows for protection of key downtown business and critical community institutions.

Solution – The project would:

- ☐ install a new east side well;
- ☐ clean and restore the Skyline storage tank;
- ☐ upgrade the downtown water mains by installing approximately 5,630 feet of eight-inch and 12-inch mains; and
- ☐ install approximately 5,150 feet of 10-inch east-west transfer main along Skyline Drive.

Project Status – As of November 15, 2012, Commerce does not have sufficient TSEP funds to award grant funding to the City of Polson.

2013 Biennium TSEP Project Grants

**City of Hardin
Big Horn County
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 4,124 points out of a possible 5,000 points and ranked 1st out of 59 applications. **The Legislature awarded a TSEP Project Grant to the City of Hardin for the 2013 Biennium in the amount of \$500,000.**

Funding Source	Type of Funds	Amount	Status of Funds
DEQ	SRF Loan	\$874,000	Loan awarded
Commerce	TSEP Grant	\$ 500,000	Grant awarded
City	Cash	\$ 400,000	Committed by resolution
Commerce	Coal Board Grant	\$ 400,000	Grant awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
Project Total		\$2,274,000	

Median Household Income:	\$28,018	Total Population:	3,540
Percent Non-TSEP Matching Funds:	77%	Number of Households:	1,354

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$28.32	-	Target Rate:	\$53.70	-
Existing Wastewater Rate:	\$31.05	-	Rate With Proposed TSEP Assistance:	\$60.59	113%
Existing Combined Rate:	\$59.37	111%	Rate Without TSEP Assistance:	\$62.48	116%

Project Summary

History – The water treatment plant in Hardin was constructed in 1920, with most components of that original plant still in operation. Upgrades were completed in the 1950s (sedimentation), 1970s (water storage tanks), 1980s (new intake), 1990s (clearwell and waste stream handling) and 2000s (flocculators and tank painting). Unfortunately, the plant has not been automated to protect the public from a potential breakthrough of filters, and many components from the 1920s and 1950s are undersized and/or failing.

Problem – The water system has the following deficiencies:

- ☐ no ability to stop flow through any of the filters regardless of turbidity levels,
- ☐ lack of filter to waste rinse system,
- ☐ lack of sludge removal system in the sedimentation basin,
- ☐ no back-up power or pump at small booster station,
- ☐ no back-up blower for air scour system,
- ☐ no back-up rapid mix unit,
- ☐ storage tanks in need of repair, and
- ☐ insufficient pumping capacity at new intake.

Solution – The project would:

- ☐ install automated controls of effluent,
- ☐ install a filter-to-waste rinse capability,
- ☐ install automatic sludge removal from sedimentation basins,
- ☐ install back-up power and pump at small booster station,
- ☐ install back-up mixer and blower,
- ☐ install overflow pipe at concrete tank and cathodic protection at steel tank,
- ☐ rehabilitate the intake,
- ☐ install variable frequency drives, controls and new suction line for backwash pumps,
- ☐ create a source water protection plan, and
- ☐ clean the waste line to the filters.

Project Status – As of November 15, 2012, \$127,708 in grant funds has been expended and is 0% complete.

**Park County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 4,050 points out of a possible 5,000 points and ranked 2nd out of 59 applications. **The Legislature awarded a TSEP Project Grant to Park County for the 2013 Biennium in the amount of \$555,626.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 555,626	Awarded grant
USDOT	FHWA Grant	\$ 608,750	Ear-marked to receive funds in 2010
Project Total		\$1,164,376	

Median Household Income:	\$31,739	Total Population:	15,694
Percent Non-TSEP Matching Funds:	52%	Number of Households:	6,828

Project Summary

History – Park County has identified one bridge that is in critical condition and in need of replacement. The Ninth Street Bridge, which crosses over a channel of the Yellowstone River, connects Siebeck Islands with the rest of the City of Livingston. The 180-foot bridge is a six-span structure constructed in 1964. The bridge provides sole access for 26 full-time residences, ten landowners and two businesses. In 2008, the bridge was seriously damaged by flooding and was closed for eight days. A temporary “Bailey” bridge, on loan to the county from the Montana Department of Transportation (MDT), has been assembled over the top of the bridge and the following restrictions have been imposed on its use: only residents and property owners are allowed to cross the bridge, vehicles must weigh under three tons, a five mile per hour speed limit, and people are not allowed to walk or ride a bicycle across the bridge. Vehicles weighing over three tons, including emergency services equipment, farm implements, county maintenance equipment, septic pump trucks, commercial truck traffic, etc. are not permitted to cross the bridge. Prior to the restrictions being placed on the bridge, traffic volumes were estimated to be 300 vehicles per day and 100 pedestrians. The bridge is a designated mail route. The bridge is posted at three tons.

Problem – The bridge has a sufficiency rating of 2.0. Deficiencies include:

- ☐ pier three has settled 28 inches,
- ☐ abutment one and piers two, four, five, and six are all undermined,
- ☐ steel piles are exposed in the undermined area at abutment one, pier two, and pier five,
- ☐ steel piles have minor section loss, and moderate scaling is present on all substructures, and
- ☐ piers have severe scour/erosion issues

Solution – The project would replace the “Bailey” bridge with a 200-foot, single-lane, two-span, pre-stressed concrete bulb tee superstructure with a separated pedestrian path.

Project Status – On September 6, 2011, Commerce received a letter from Park County that the local government had secured alternative funding to complete the project and was declining its TSEP Project Grant. This action resulted in an additional \$555,626 becoming available for projects awarded conditional grants.

**Town of Sheridan
Madison County
Wastewater System Improvements
TSEP Project Grant
2013 Biennium**

This application received 4,049 points out of a possible 5,000 points and ranked 3rd out of 59 applications for funding in the 2013 biennium. **The Legislature awarded a TSEP Project Grant to the Town of Sheridan for the 2013 Biennium in the amount of \$750,000.**

Funding Source	Type of Funds	Amount	Status of Funds
USDA RD	Grant	\$2,173,000	Funding awarded
USDA RD	Loan	\$2,846,000	Funding awarded
Commerce	TSEP Grant	\$ 750,000	Awarded grant
Commerce	CDBG Grant	\$ 450,000	Not awarded
Army Corps	STAG/WRDA Grant	\$ 394,000	Application submitted March 2010, not awarded
Local		\$ 131,000	
DNRC	RRGL Grant	\$ 100,000	Funding awarded
Project Total		\$6,000,000	

Median Household Income:		\$21,118	Total Population:		659
Percent Non-TSEP Matching Funds:		89%	Number of Households:		374
	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$33.00	-	Target Rate:	\$40.48	-
Existing Wastewater Rate:	\$16.40	-	Rate With Proposed TSEP Assistance:	\$80.22	198%
Existing Combined Rate:	\$49.40	123%	Rate Without TSEP Assistance:	\$87.70	217%

Project Summary

History – The wastewater system in Sheridan was constructed in 1959. The treatment facility is a single-cell facultative lagoon with continuous discharge to a series of irrigation ditches. The collection system consists of approximately 27,000 feet of eight-inch and 10-inch clay tile and PVC gravity sewer lines. Storm drainage is accommodated by overland flow. The Montana Department of Environmental Quality (DEQ) issued an administrative order on consent in 2009 that imposes a moratorium on new sewer hook-ups and requires the town to construct a new treatment facility by the end of 2012.

Problem – The wastewater system has the following deficiencies:

- ☐ discharge exceeds the permitted seven-day and 30-day average biochemical oxygen demand (BOD₅) concentrations,
- ☐ discharge forming solids in the discharge channel,
- ☐ seepage in the north lagoon embankment,
- ☐ biological and hydraulic overloading of the lagoon,
- ☐ deterioration of the outlet weir structure resulting in inaccurate flow measurement,
- ☐ lagoon is severely undersized for the town's population,
- ☐ residential development continues to occur on the land adjacent to the fields through which the irrigation ditches flow, and
- ☐ the existing treatment lagoon site lacks sufficient space for completing needed updates.

Solution – The project would:

- ☐ replace approximately 700 feet of eight-inch gravity sewer main from the existing lagoon discharge point to a new lift station,
- ☐ construction of an aerated treatment lagoon, two lift stations, approximately 24,000 feet of force main, storage lagoons, an irrigation pumping station, and expansion of an existing agricultural pivot, and
- ☐ reclamation of the existing lagoon and sludge disposal.

Project Status – As of November 15, 2012, \$133,439 in grant funds has been expended and is 10% complete.

**Yellowstone County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 4,039 points out of a possible 5,000 points and ranked 4th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Yellowstone County for the 2013 Biennium in the amount of \$157,227.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$157,227	Grant awarded
County	Cash	\$157,227	Committed by resolution
Project Total		\$314,454	
Amount Reverted		(\$11,380)	

Median Household Income:	\$36,727	Total Population:	142,348
Percent Non-TSEP Matching Funds:	50%	Number of Households:	56,636

Project Summary

History – Yellowstone County has identified three bridges that are in critical condition and in need of replacement.

- ❑ The 12 Mile Bridge crosses the Billings Bench Water Association (BBWA) canal and is located approximately three miles northwest of the community of Shepherd. The 15-foot bridge is a single-span timber structure constructed in 1962. The bridge serves as the sole access to one ranch/home. There is no recent traffic count, but the county estimates traffic is light. The bridge is posted at 10 tons.
- ❑ The South 24th Road Bridge crosses the Huntley Project Canal and is located approximately three miles east of the community of Ballantine. The 19-foot bridge is a single-span timber structure constructed in 1964. The bridge serves as the sole access to a gravel pit, one business, and one farm/ranch property south of the bridge. There is no recent traffic count, but the county estimates traffic is light. The bridge is posted at 10 tons.
- ❑ The South 44th Road Bridge crosses the Huntley Project Canal and is located approximately four miles east of Pompey's Pillar. The 16-foot bridge is a single-span timber structure constructed in 1962. The bridge provides sole access to three or four homes or businesses south of the bridge, and is a school bus route. There is no recent traffic count, but the county estimates the traffic is light to moderate. The bridge is posted at 10 tons.

Problem – The three bridges have the following deficiencies.

- ❑ The 12 Mile Bridge has a sufficiency rating of 39.9. Deficiencies include:
 - deck is abraded and soft,
 - alignment between pile caps and piling has shifted, distorting the connecting hardware,
 - canal has moved to the south creating a misalignment with the bridge, and
 - bridge is too narrow to support two-way traffic.
- ❑ The South 24th Road Bridge has a sufficiency rating of 44.3. Deficiencies include:
 - deck is abraded and soft, and
 - bridge is too narrow to support two-way traffic.
- ❑ The South 44th Road Bridge has a sufficiency rating of 46.2. Deficiencies include:
 - south abutment is being undercut and appears to have no piling, and
 - bridge is too narrow to support two-way traffic.

Solution – The proposed project would replace all three bridges with concrete box culverts.

Project Status – As of November 15, 2012, \$145,847 in grant funds have been expended and the project is 100% completed. An additional \$11,380 in unexpended funds reverted to the TSEP program and was made available for projects awarded conditional grants.

**Carter Chouteau County Water & Sewer District
Chouteau County
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,950 points out of a possible 5,000 points and ranked 7th out of 59 applications for funding in the 2013 biennium. **The Legislature awarded a TSEP Project Grant to Carter Chouteau County Water & Sewer District for the 2013 Biennium in the amount of \$750,000.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 252,000	Grant awarded
Army Corps	WRDA Grant	\$ 85,000	Appropriation awarded
DEQ	SRF Loan	\$ 83,500	Loan approved
DEQ	SRF Loan Forgiveness	\$ 83,500	Grant awarded
Project Total		\$504,000	

Median Household Income:	\$31,563	Total Population:	200
Percent Non-TSEP Matching Funds:	50%	Number of Households:	76

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$101/community \$136/rural (base rates)	274% 369%	Target Rate:	\$36.82 (water only)	
Existing Wastewater Rate:	\$12.00 community only	NA	Rate with Proposed TSEP Assistance:	\$177.42	482%
Existing Combined Rate:	\$101.00 community only	NA	Rate without TSEP Assistance:	\$220.18	598%

The increase in user rates as a result of the proposed project is approximately \$58 per month. The "rate with proposed TSEP assistance" was derived by multiplying the percentage of users within the community (40) by the new rate and multiplying the percentage of users in the rural area (42) by the new rate, and adding the two together.

Project Summary

History – The Carter-Chouteau County Water & Sewer District was created in 1975 and a small regional, rural type water system was constructed in 1977. The water supply source for the system is an infiltration gallery along the banks of the Missouri River, approximately three miles southeast of the community of Carter. Water is pumped through a series of three booster pump stations to pressurize the system and distribute water to users of the district. The distribution system consists of approximately 48 miles of PVC mains, ranging in size from one to six inches in diameter. The system has four pressure zones, and each zone is supplied with water from a pump house. Pump house #1 is equipped with a gas chlorinator. The district installed point-of-use (POU) filters to treat for arsenic; however, the U.S. Environmental Protection Agency (EPA) issued an administrative order in November 2009 that requires filtration.

Problem – The water system has the following deficiency: water source is classified by the Montana Department of Environmental Quality (DEQ) as ground water under the direct influence of surface water (GWUDISW).

Solution – The project would construct a water treatment plant. Once the water treatment plant is operating, the need for individual POU devices will be eliminated.

Project Status – As of November 15, 2012, \$21,278 in grant funds have been expended and is 0% complete. On June 1, 2012, Commerce received a letter from Carter Chouteau County Water & Sewer District formally reducing the project scope of work. This action resulted in an additional \$498,000 becoming available for projects awarded conditional grants.

**Sun Prairie Village County Water & Sewer District
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,904 points out of a possible 5,000 points and ranked 8th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Sun Prairie Village County Water & Sewer District for the 2013 Biennium in the amount of \$625,000.**

Funding Source	Type of Funds	Amount	Status of Funds
USDA	RD Loan	\$1,399,000	Loan approved
USDA	RD Grant	\$979,000	Grant awarded
Commerce	TSEP Grant	\$ 625,000	Grant awarded
Commerce	CDBG Grant	\$ 450,000	Grant awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
District	Local Match	\$23,000	Committed
Project Total		\$3,576,000	

Median Household Income:	\$32,992	Total Population:	1,400
Percent Non-TSEP Matching Funds:	83%	Number of Households:	489

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$35.44	-	Target Rate:	\$63.23	-
Existing Wastewater Rate:	\$24.41	-	Rate With Proposed TSEP Assistance:	\$93.50	148%
Existing Combined Rate:	\$59.85	95%	Rate Without TSEP Assistance:	\$98.52	156%

Project Summary

History – The Sun Prairie Village County Water and Sewer District is located approximately 12 miles west of Great Falls. The water system was originally constructed in the mid-1970s. The water supply for the district's water system is a well field located on property that is leased from a private landowner. The district has an existing water storage capacity of 535,000 gallons with 85,000 gallons in an elevated tank and the remaining 450,000 gallons in a concrete reservoir.

Problem – The water system has the following deficiencies:

- ☐ the current land lease for the well field is set to expire the end of 2021, at which time the district will lose its only supply of water,
- ☐ transmission main from the existing well field to the concrete reservoir has a high frequency of locatable leaks due to being installed incorrectly,
- ☐ water storage capacity have a total storage greater than the average day demand plus the required fire flows,
- ☐ no permanent backup power generation to power the distribution pumps,
- ☐ concentrations of sulfate, sodium, iron, and manganese exceed either the recommended standards or the secondary standards set by the U.S. Environmental Protection Agency, and
- ☐ no meters on service connections.

Solution – The proposed project would:

- ☐ construct a new well field in a county park within the district boundaries,
- ☐ install a 250kW backup generator to provide power to both the well field pumps and the distribution system pumps,
- ☐ construct a new reverse osmosis treatment plant, and
- ☐ install meters on each service connection.

Project Status – As of November 15, 2012, \$5,163.92 in grant funds have been expended and the project is 0% complete.

**Sweet Grass County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,874 points out of a possible 5,000 points and ranked 9th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Sweet Grass County for the 2013 Biennium in the amount of \$156,678.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$156,678	Grant awarded
County	Cash	\$156,679	Committed by resolution, partially expended on PER
Project Total		\$313,357	

Median Household Income:	\$32,422	Total Population:	3,609
Percent Non-TSEP Matching Funds:	50%	Number of Households:	1,860

Project Summary

History – Sweet Grass County has identified one bridge that is in critical condition and in need of replacement. The Otter Creek Road Bridge is located 13 miles northeast of the City of Big Timber. The 20.5-foot long bridge is a one-lane, single-span, untreated timber structure constructed in the 1960s. The road provides access to eight permanent homes and multiple ranching operations, and serves as a primary access point for recreational users of Glasston Lake. The road serves as a farm to market and mail route. Traffic volume is estimated to be 300 vehicles per day with 10% truck traffic hauling hay and cattle. The bridge currently has no posted weight restriction. Closure of the bridge would result in a 4-mile detour from one side of the bridge to the other side.

Problem – The bridge has a sufficiency rating of 38.7. Deficiencies include:

- ☐ timber pile caps are rotating,
- ☐ timber piles are rotting near ground level,
- ☐ timber stringers are in poor conditions with several timbers cracker or broken, several other badly checked and some showing signs of decay,
- ☐ backwalls are crushing and rotting,
- ☐ wingwalls area split, checked, and failing at the northwest corner, and
- ☐ 20-foot wide bridge is narrow and does not conform to the county's bridge standards.

Solution – The project would replace the bridge with a prestressed concrete tri-deck beam superstructure.

Project Status – As of November 15, 2012, \$0 has been expended and the project is 0% complete.

**Beaverhead County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,869 points out of a possible 5,000 points and ranked 10th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Beaverhead County for the 2013 Biennium in the amount of \$426,941.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$426,941	Grant Awarded
County	Cash	\$396,885	Committed by resolution, partially expended on PER
County	In-kind	\$ 30,056	Committed by resolution
Project Total		\$853,882	

Median Household Income:	\$28,962	Total Population:	9,202
Percent Non-TSEP Matching Funds:	50%	Number of Households:	3,684

Project Summary

History – Beaverhead County has identified three bridges that are in critical condition and in need of replacement.

- ❑ The Anderson Lane Bridge is located six miles north of the City of Dillon across the West Side Canal. The 14.5-foot bridge is a single-span, railroad car structure constructed in the 1970s. The road serves approximately 15 permanent and five part-time residences, and is an east-west connection between Montana Highways 91 and 41. The road serves as school bus, mail, and garbage route. Traffic volume is estimated to be 140 to 190 vehicles per day. The bridge currently has no posted weight restriction. Closure of the bridge would result in a 19-mile detour from one side of the bridge to the other side.
- ❑ The Steel Creek Road Bridge is located one mile northeast of the community of Wisdom across Steel Creek. The 28-foot long bridge is a single-span, railroad car structure constructed in 1949. The road provides sole access to 12 existing homes and 38 platted lots, ranchers, recreationalists, and Forest Service campground and trailhead. Traffic volume is estimated to be 115 vehicles per day. The bridge is posted at eight tons.
- ❑ The Bannack Bench Road Bridge is located one mile west of the ghost town of Bannack across Grasshopper Creek. The 29-foot long bridge is a single-span, steel stringer structure constructed in 1975. The road provides access to two permanent homes and four ranching/agricultural operations, and access to the Lewis & Clark Trail. The road serves as a north-south connection between Montana Highways 278 and 324. Traffic volume is estimated to be 57 vehicles per day based on residential use; however, the county estimates tourists and recreational users far outnumber residential users on an annual basis. The bridge is posted at 13 tons. Closure of the bridge would result in a 27-mile detour from one side of the bridge to the other side.

Problem – The three bridges have the following deficiencies.

- ❑ The Anderson Lane Bridge has a sufficiency rating of 38.7. Deficiencies include: rotten, crushed, and failing foundation; west foundation consists of only a timber sill that is susceptible to scour and settlement; east foundation consists of a concrete wall that is tipping in 10 degrees and failing; rail is substandard and incapable of absorbing vehicular impacts; and 20-foot wide bridge is narrow and does not conform to the county's bridge standards.
- ❑ The Steel Creek Bridge has a sufficiency rating of 43.5. Deficiencies include: bottom flange of the upstream railroad car girder is twisted and has large cutouts; timber backwalls have moderate splitting and cracking; northwest wingwall failing; settlement of the east foundation (10-inches); bridge lacks any type of bridge rail; and 18.5-foot wide bridge is narrow and does not conform to the county's bridge standards.
- ❑ The Bannack Bench Bridge has a sufficiency rating of 47.2. Deficiencies include: foundation is rotten and failing; timber cap on the south abutment is crushed, and there is a missing backing plank on the south abutment as well; moderate surface rust on steel I-beams; deck timbers are crushing; rail is substandard and incapable of absorbing vehicular impacts, and 19.5-foot wide bridge is narrow and does not conform to the county's bridge standards.

Solution – The proposed project would:

- ❑ replace the Anderson Lane Bridge with a three-sided precast concrete box culvert, and
- ❑ replace the Steel Creek Road and Bannack Bench Road Bridges with single-span, precast pre-stressed, concrete tri-deck beam superstructures.

Project Status – As of November 15, 2012, \$329,708 in grant funds have been expended and the project is approximately 66% completed.

**Carbon County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,863 points out of a possible 5,000 points and ranked 11th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Carbon County for the 2013 Biennium in the amount of \$406,695.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$194,733	Grant awarded, reduced amount approved
County	Cash	\$179,732	Committed by resolution
County	Cash	\$ 15,000	Expended on PER
Project Total		\$389,465	

Median Household Income:	\$32,139	Total Population:	9,552
Percent Non-TSEP Matching Funds:	50%	Number of Households:	4,065

Project Summary

History – Carbon County has identified two bridges that are in critical condition and in need of replacement.

- ❑ The 19th Street Bridge crosses Rock Creek on the southeast edge of the City of Red Lodge. The 63-foot long bridge is a single-span, steel pony truss structure constructed in 1907. The bridge serves approximately 20 residential homes and local businesses. Traffic volume is estimated to be 380 vehicles per day. The road serves as designated mail and school route. The bridge is posted at five tons. Closure of the bridge would result in a one-mile detour from one side of the bridge to the other side.
- ❑ The Cooney Dam Road Bridge is located approximately 13 miles west of the Town of Joliet. This structure crosses Red Lodge Creek. The 25-foot long bridge is a single-span, steel stringer structure constructed in 1981 and reconstructed in 1991. The bridge provides the single most direct access to Cooney State Park, and serves numerous full time residences and several ranching operations. Traffic volume is estimated to be 800 vehicles per day in the summer. The road serves as designated mail and school route. The bridge has an operating rating of 16.7 tons. The bridge currently has no posted weight restriction. Closure of the bridge would result in a 60-mile detour from one side of the bridge to the other side.

Problem – The two bridges have the following deficiencies.

- ❑ The 19th Street Bridge has a sufficiency rating of 31.5. Deficiencies include:
 - superstructure constructed of low strength mild steel that is corroding,
 - truss superstructure is a fracture critical member and there is no load path redundancy,
 - abutment concrete is unreinforced, and de-lamination and section loss are prevalent, and
 - 16-foot wide bridge is narrow and does not conform to the county's bridge standards.
- ❑ The Cooney Dam Road Bridge has a sufficiency rating of 49.5. Deficiencies include:
 - insufficient load capacity resulting from the use of rail car structural steel members.
 - extensive section loss and rotation of multiple piles.

Solution – The project would:

- ❑ replace the 19th Street Bridge with a 75-foot, single-span precast, prestressed concrete bulb tee beam structure
- ❑ replace the Cooney Dam Road Bridge with a 80-foot, single-span precast, prestressed concrete bulb tee beam structure.

Project Status – As of November 15, 2012, \$71,529 in grant funds have been expended and the project is 50% completed. On June 28, 2012, Commerce received a letter from Carbon County formally modifying the project scope of work to remove one of the bridges for funding with the TSEP Project Grant. This action resulted in an additional \$211,962 becoming available for projects awarded conditional grants.

**Jefferson County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,832 points out of a possible 5,000 points and ranked 12th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Jefferson County for the 2013 Biennium in the amount of \$218,634.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$40,700	Grant awarded
County	Cash	\$40,700	Committed by resolution, partially expended on PER
Project Total		\$81,400	

Median Household Income:	\$41,506	Total Population:	10,400
Percent Non-TSEP Matching Funds:	50%	Number of Households:	4,200

Project Summary

History – Jefferson County has identified two bridges that are in critical condition and in need of replacement.

- ❑ the Basin Creek Road Bridge is located at the north end of the community of Basin. The 51-foot bridge is a single-lane, single-span, timber structure constructed in 1983. The road provides sole access to approximately 10 permanent residences. Traffic volume is estimated to be 400 vehicles per day. The bridge currently has no posted weight restriction.
- ❑ the Cottonwood Canyon Bridge is located approximately 12 miles east of the Town of Whitehall. The 14-foot bridge is a timber structure estimated to have been constructed in the 1970s. The bridge is a primary route for three ranches and serves recreational users. Traffic volume is estimated to be 100 vehicles per day. The bridge currently has no posted weight restriction. Closure of the bridge would result in a 27-mile detour from one side of the bridge to the other side.

Problem – The bridges have the following deficiencies.

- ❑ the Basin Creek Road Bridge has a sufficiency rating of 32.9. Deficiencies include:
 - insufficient load capacity,
 - undersized and rotted timber stringers,
 - stringers are exhibiting significant checking, rotting, deflection, rotation, and cracking,
 - deterioration of both abutments,
 - abutments exhibit vertical cracking, and several of the timber piles are tipping,
 - poor channel alignment makes foundation susceptible to scour, and
 - bridge is too narrow to safely handle two-way travel or oversized vehicles.
- ❑ the Cottonwood Canyon Bridge has a sufficiency rating of 18.3. Deficiencies include:
 - substructure consists of stacked rock without mortar and is showing advanced signs of deterioration from rock movement and settlement, as well as scour,
 - insufficient load carrying capacity,
 - the timber stringers exhibit significant checking and areas of rot, deflection, rotation, and lack of bracing,
 - timber planks have excessive wear and many are cracked and rotting,
 - bridge is too narrow to safely handle two-way traffic or oversized vehicles, and
 - structure lacks proper bridge rail and guardrail.

Solution – The project would:

- ❑ replace the Basin Creek Road Bridge with a precast, prestressed concrete tri-deck superstructure, and
- ❑ replace the Cottonwood Canyon Bridge with a concrete box culvert.

Project Status – As of November 15, 2012, \$12,766 grant funds have been expended and the project is 0% completed. On March 5, 2012, Commerce received a letter from Jefferson County formally modifying the project scope of work to remove one of the bridges for funding with the TSEP Project Grant. This action resulted in an additional \$177,934 becoming available for projects awarded conditional grants.

**Hebgen Lake Estates County Water & Sewer District
Gallatin County
Wastewater System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,830 points out of a possible 5,000 points and ranked 13th out of 59 for funding in the 2013 biennium. **The Legislature awarded a TSEP Project Grant to Hebgen Lake Estates County Water & Sewer District for the 2013 Biennium in the amount of \$720,000.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 720,000	Grant awarded
DEQ	SRF Loan	\$ 665,000	Loan approved
Army Corps	STAG/WRDA Grant	\$ 255,000	Grant awarded
DEQ	SRF Loan Forgiveness	\$ 218,000	Grant awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
Project Total		\$1,958,000	

Median Household Income:	\$37,494	Total Population:	172
Percent Non-TSEP Matching Funds:	63%	Number of Households:	80

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$23.06	-	Target Rate:	\$71.86	-
Existing Wastewater Rate:	\$58.76	-	Rate With Proposed TSEP Assistance:	\$111.78	156%
Existing Combined Rate:	\$81.82	114%	Rate Without TSEP Assistance:	\$141.58	197%

Project Summary

History – The wastewater system serving Hebgen Lake Estates was constructed around 1974, and consists of a gravity collection system, a submersible pump lift station, an aerated pond, and three infiltration/percolation ponds. The water and wastewater systems were operated as rural improvement districts (RID) by Gallatin County before the assets and operations of the systems were transferred to the Hebgen Lake Estates County Water & Sewer District created in 2009. The system currently has 46 homes and 32 duplex or multifamily units. The Montana Department of Environmental Quality (DEQ) issued the county two violation letters, one in 2003 and one in 2005 informing the county that nearby monitoring wells exceeded water quality standards for nitrates and that the lagoon appeared to be leaking. The county signed a consent order with DEQ in 2005; the compliance schedule required the county to complete the construction of new wastewater treatment facility by October 2008. A TSEP grant was awarded in 2007, but the grant was terminated in 2009 when the deadline was not met for obtaining funding for the project. The district has negotiated a new compliance order with DEQ for a completion date of October 2012.

Problem – The wastewater system has the following deficiencies:

- ☐ the lift station pumps are old and the electrical controls are outdated,
- ☐ nitrate levels in monitoring well #3 consistently exceed the water quality standard, and
- ☐ the single-cell lagoon does not meet current design standards, the blowers and aeration piping have failed, and the liner is leaking beyond the acceptable standard.

Solution – The project would:

- ☐ construct a new submersible lift station and,
- ☐ construct a Level 2 treatment system consisting of re-circulating packed filter beds.

Project Status – As of November 15, 2012, \$117,627 in grant funds have been expended and the project is 0% completed.

**Gallatin Gateway County Water & Sewer District
New Wastewater System
TSEP Project Grant
2013 Biennium**

This application received 3,790 points out of a possible 5,000 points and ranked 15th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Gallatin Gateway County Water & Sewer District for the 2013 Biennium in the amount of \$750,000,** conditioned on locating the drainfield for the new wastewater system not immediately up-gradient from any existing or planned public or private wells.

Funding Source	Type of Funds	Amount	Status of Funds
USDA	RD Loan	\$1,650,000	Loan awarded
USDA	RD Grant	\$1,815,000	Grant awarded
Commerce	TSEP Grant	\$ 750,000	Grant awarded
Army Corps	STAG/WRDA Grant	\$ 600,000	Grant not awarded
Commerce	CDBG Grant	\$ 450,000	Grant awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
Project Total		\$4,765,000	

Median Household Income:	\$30,500	Total Population:	168
Percent Non-TSEP Matching Funds:	83%	Number of Households:	67

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	NA	-	Target Rate:	\$22.88	-
Existing Wastewater Rate:	NA	-	Rate With Proposed TSEP Assistance:	\$57.78	253%
Existing Combined Rate:	NA	-	Rate Without TSEP Assistance:	\$91.16	398%

Project Summary

History – The unincorporated community of Gallatin Gateway is served by individual on-site septic systems and drinking water wells. The majority of the septic systems, cesspools, and seepage pits located in the project area were installed before 1966, prior to the creation of health department regulations, and therefore, do not comply with current regulations. The county board of health will not approve the construction of new homes or businesses because the district cannot meet all regulations because the lot sizes are too small. The Gallatin Gateway County Water & Sewer District was created in March 2009. The Gallatin River runs adjacent to the community.

Problem – The lack of a centralized wastewater system in the community has resulted in the following problems:

- ☐ small lot sizes do not comply with septic system regulations, and
- ☐ soils are coarse-grained sands and gravels, so there is the potential of contaminating ground water and water supply wells.

Proposed Solution – The proposed project would:

- ☐ construct a gravity collection system,
- ☐ construct a centralized lift station, and
- ☐ construct a septic tank with Level 2 treatment and pressure dosed drainfield.

Project Status – As of November 15, 2012, \$0 in grant funds have been expended. The project is 0% complete

**Melrose Water & Sewer District
Butte-Silver Bow County
Wastewater System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,765 points out of a possible 5,000 points and ranked 17th out of 59 for funding in the 2013 biennium. **The Legislature awarded a TSEP Project Grant to Melrose Water & Sewer District for the 2013 Biennium in the amount of \$162,000.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$162,000	Grant awarded
DEQ	SRF Loan	\$ 129,692	Loan approved
DEQ	SRF Loan Forgiveness	\$ 47,400	Grant awarded
District	Cash	\$ 15,000	Expended on planning
Project Total		\$354,092	

Median Household Income:	\$28,750	Total Population:	131
Percent Non-TSEP Matching Funds:	54%	Number of Households:	60

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	NA	-	Target Rate:	\$21.56	-
Existing Wastewater Rate:	\$25.00	116%	Rate With Proposed TSEP Assistance:	\$28.11	130%
Existing Combined Rate:	NA	-	Rate Without TSEP Assistance:	\$43.34	201%

Project Summary

History – The district was created in 1974 and a wastewater system in Melrose was constructed in 1991. It consists of approximately 6,850 feet of eight-inch PVC gravity mains, a lift station, approximately 5,500 feet of four-inch PVC force main, and a facultative lagoon treatment system. Treated effluent is then discharged from the facultative lagoons to an existing irrigation pivot for final disposal. Residents utilize individual wells for drinking water.

Problem – The wastewater system has the following deficiencies:

- ☐ pump seals are leaking and wastewater is entering the lubricating oil causing pump failures,
- ☐ return line for the drywell pumps plug with debris causing the pumps to cavitate and over heat,
- ☐ wet well pumps appear to cavitate upon startup, causing stress on the bearings and seals,
- ☐ lift station is not pumping to design standards,
- ☐ gate valves, check valves, air relief valve, etc. are at the end of their useful life, and
- ☐ inter-pond diversion structures are corroded and non-functional.

Solution – The project would:

- ☐ replace existing lift station pumping system, and
- ☐ replace the lagoon inlet and interpond structures.

Project Status – As of November 15, 2012, \$158,618 in grant funds have been expended and the project is 100% completed and waiting for final closeout documents.

**Blaine County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,739 points out of a possible 5,000 points and ranked 18th out of 59 for funding in the 2013 biennium. **The Legislature awarded a TSEP Project Grant to Blaine County for the 2013 Biennium in the amount of \$434,309.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$434,309	Grant awarded
County	Cash	\$264,086	Committed by resolution, partially expended on PER
County	In-Kind	\$187,950	Committed by resolution
Project Total		\$886,345	

Median Household Income:	\$25,247	Total Population:	7,009
Percent Non-TSEP Matching Funds:	51%	Number of Households:	2,501

Project Summary

History – Blaine County has identified three bridges that are in critical condition and in need of replacement.

- ❑ The Corral Coulee Bridge is located 22 miles north of the City of Chinook on Bagan Road. The 51-foot bridge is a single-span wood structure constructed in 1933. The road is a rural route serving several ranches and farms, as well as natural gas well sites, and is important for transporting agricultural products to market. There are two permanent residences on the route. Traffic volume is estimated to be 10 to 20 vehicles per day, with 10 to 20% of traffic considered to be truck traffic. The bridge is posted at five tons. Closure of the bridge would result in a 20-mile detour from one side of the bridge to the other side.
- ❑ The People's Creek Bridge is located six miles northeast of the community of Cleveland on Barney Olsen Road. The 35-foot bridge is a single-span wood structure constructed 1933. The road serves four permanent residences, several ranches and farms, recreationalists, and is important for transporting agricultural products to market. The road serves as school bus and mail route. Traffic volume is estimated to be 10 to 20 vehicles per day, with 10 to 20% of traffic considered to be truck traffic. The bridge is posted at 10 tons. Closure of the bridge would result in a 35-mile detour from one side of the bridge to the other side.
- ❑ The Battle Creek Bridge is located five miles east of Chinook on Old Highway Road. The 102-foot single-span steel truss bridge was constructed in 1915. The road serves three full-time residences, several farms and ranches and is important as a farm-to-market route. The road serves as school bus and mail route. Traffic volume is estimated to be 50 vehicles per day. The bridge is posted at 110 tons. Closure of the bridge would result in a three-mile detour from one side of the bridge to the other side.

Problem – The three bridges have the following deficiencies.

- ❑ The Corral Coulee Bridge has a sufficiency rating of 43.9. Deficiencies include: bridge and approaches lack crashworthy railing and end treatments; timber girders show minor rot and locations of splitting; timber abutments show rot towards the ground and bulging between piles; timber caps at abutments have minor rotation and checking; timber cap at pier is split on the bottom and has minor crushing above the piles; timber piles at the abutments have shallow surface rot at the ground line; and timber piles at pier are crushing and show rot.
- ❑ The People's Creek Bridge has a sufficiency rating of 48.8. Deficiencies include: bridge and approaches lack crashworthy railing and end treatments; timber abutments have fill pressure and rotting wood; timber caps at abutments have minor rotation and areas of decay; and timber piles have deep checks and minor rot at split locations.
- ❑ The Battle Creek Bridge has a sufficiency rating of 26.4. Deficiencies include: bridge and approaches lack crashworthy railing and end treatments; timber deck has areas of rotten and broken boards; rust, pitting and peeling throughout steel floor beams and truss; steel truss has loose members and damaged members; concrete abutment #2 has large cracks with cable strapped to hold concrete in place, and abutment #1 has a tight crack near center of structure; timber piles are submerged, but some surface rot is visible; and steel bearings are immovable due to dirt, debris, and rust.

Solution - The project would:

- ❑ replace the Corral Coulee Bridge and the People's Creek Bridge with three-sided concrete box bridges, utilizing county crews, and
- ❑ rehabilitate the Battle Creek Bridge with a steel truss structure and gravel deck with a steel pile foundation.

Project Status – As of November 15, 2012, \$3,298 in grant funds have been expended and the project is 0% completed.

**Gallatin County
Solid Waste System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,661 points out of a possible 5,000 points and ranked 21st out of 59 applications. **The Legislature awarded a TSEP Project Grant to West Yellowstone-Hebgen Basin Refuse Disposal District for the 2013 Biennium in the amount of \$246,563.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$246,563	Grant awarded
District	Cash	\$246,563	Committed by resolution, partially expended on PER
Project Total		\$493,126	

Median Household Income:	\$34,375	Total Population:	1,511
Percent Non-TSEP Matching Funds:	50%	Number of Households:	233

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Solid Waste Rate:	\$33.15	386%	Target Rate:	\$8.59	-
			Rate With Proposed TSEP Assistance:	\$33.15	386%
			Rate Without TSEP Assistance:	\$40.16	468%

Project Summary

History – The transfer station is located approximately four miles north of the Town of West Yellowstone on the east side of U.S. Highway 191 near the airport. The transfer station was constructed in 1982 to replace the existing landfill. It serves the town and the entire area of school district #69. A compost facility was added in 2001, and minor upgrades to assist with access and air flow were completed in 2008.

Problem – The existing transfer station has the following deficiencies:

- ☐ inadequate safety devices to protect the public or employees from the hopper,
- ☐ lack of sufficient tipping floor area,
- ☐ no separation of private versus commercial haulers,
- ☐ insufficient capacity to handle peak daily volumes, and
- ☐ failing storm water system.

Solution – The project would:

- ☐ construct approximately 2,400 square feet of new covered area,
- ☐ expand width of tipping area by approximately 60 feet,
- ☐ install push walls to help funnel material flow into the hopper, and
- ☐ improve storm water disposal system.

Project Status – As of November 15, 2012, \$42,979 grant funds have been expended and the project is 10% completed.

**Ravalli County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,634 points out of a possible 5,000 points and ranked 23rd out of 59 applications. **The Legislature awarded a TSEP Project Grant to Ravalli County for the 2013 Biennium in the amount of \$142,616.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$142,616	Grant awarded
County	Cash	\$118,408	Committed by resolution, partially expended on PER
County	In-Kind	\$ 24,208	Committed by resolution
Project Total		\$285,232	

Median Household Income:	\$31,992	Total Population:	40,664
Percent Non-TSEP Matching Funds:	50%	Number of Households:	14,289

Project Summary

History – Ravalli County has identified one bridge in critical condition and in need of replacement.

The Black Lane Bridge is located approximately 2.5 miles northwest of the City of Hamilton and crosses over the Corvallis Canal. The 29-foot single-span steel and concrete bridge was constructed in 1955 and reconstructed in 1975. Black Lane, which merges into the Old Corvallis Road immediately west of the bridge, serves area residents and businesses, and is used as a mail and school bus route from two school districts. The road provides an alternative route into Hamilton instead of remaining on the East Side Highway. The bridge is considered a minor collector, although traffic volume is estimated to be 1,761 vehicles per day. The bridge is posted at 10 tons. Closure of the bridge would result in a four-mile detour from one side of the bridge to the other side.

Problem – The bridge has a sufficiency rating of 64.3. Deficiencies include:

- ☐ salvaged stringers that have been splices together for adequate span,
- ☐ corrosion and rusting throughout stringer spliced plates,
- ☐ partially exposed footing showing erosion around wing wall corners,
- ☐ cracking on the abutments, and
- ☐ bridge rail below standard and no approach rail.

Proposed Solution – The proposed project would replace the bridge with a 27-foot, precast, pre-stressed concrete, solid deck superstructure.

Project Status – As of November 15, 2012, \$0 in grant funds has been expended and is 0% complete.

**Town of Fairfield
Teton County
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,634 points out of a possible 5,000 points and ranked 23rd out of 59 applications. **The Legislature awarded a TSEP Project Grant to the Town of Fairfield for the 2013 Biennium in the amount of \$500,000.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 500,000	Grant awarded
DEQ	SRF Loan	\$ 350,000	Loan awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
Local Funds		\$ 55,960	
Project Total		\$1,005,960	

Median Household Income:	\$29,018	Total Population:	659
Percent Non-TSEP Matching Funds:	47%	Number of Households:	358

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$30.00	-	Target Rate:	\$55.62	-
Existing Wastewater Rate:	\$28.00	-	Rate With Proposed TSEP Assistance:	\$64.00	115%
Existing Combined Rate:	\$58.00	104%	Rate Without TSEP Assistance:	\$74.55	134%

Project Summary

History – The water system in Fairfield was initially constructed in the 1940s. The system, as it exists today, consists of seven wells, five well houses with chlorination equipment, two elevated steel storage tanks with a total of 210,000 gallons of storage, and the transmission/distribution system, which is composed mostly of asbestos cement pipe, and includes 40 fire hydrants and numerous valves.

Problem – The water system has the following deficiencies:

- ☐ lack of adequate seasonal source of water,
- ☐ surface water influence on ground water,
- ☐ limited emergency power to well sources,
- ☐ potential problems with chlorination contact time,
- ☐ insufficient fire flow storage,
- ☐ well and tank level control system problems,
- ☐ single water main connecting the east and west sides of town, with an inadequate number and spacing of hydrants,
- ☐ hydrants supplied by undersized mains or hydrant leads,
- ☐ inadequate valve spacing, and
- ☐ most service lines are not metered.

Solution – The project would:

- ☐ install variable speed pumps in each of the three primary wells,
- ☐ install a secondary eight-inch trunk main to connect the east and west portions of the distribution system,
- ☐ install meters on all service lines, and
- ☐ upgrade the well pump control system.

Project Status – As of November 15, 2012, \$8,330 in grant funds has been expended and is 0% complete.

**Granite County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,623 points out of a possible 5,000 points and ranked 25th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Granite County for the 2013 Biennium in the amount of \$276,408.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$276,408	Grant awarded
County	Cash	\$197,600	Committed by resolution, partially expended on PER
RAC	Grant	\$ 65,000	Grant awarded
County	In-Kind	\$ 13,808	Committed by resolution
Project Total		\$552,816	

Median Household Income:	\$27,813	Total Population:	2,830
Percent Non-TSEP Matching Funds:	50%	Number of Households:	1,200

Project Summary

History – Granite County has identified three bridges that are in critical condition and in need of replacement.

- ❑ The Boulder Creek Road Bridge (BC1) is located approximately one mile southeast of the community of Maxville. The 43-foot bridge is a single-span steel truss structure constructed in 1935. It serves as the sole access to 20 full-time residences, 47 homes, as well as providing access for recreational traffic accessing state land and the Beaverhead-Deerlodge National Forest and for logging and mining. The route is a designated mail route. Traffic volume is estimated to be 180 vehicles per day. The bridge currently has no posted weight restriction.
- ❑ The Boulder Creek Road Bridge (BC2) is located 5.5 miles southeast of Maxville. The 24-foot bridge is a single-span timber structure constructed in 1970s. It serves as the sole access to 10 full-time residences, as well as providing access for recreational traffic accessing state land and the Beaverhead-Deerlodge National Forest. Traffic volume is estimated to be 60 vehicles per day. The bridge is posted at 15 tons.
- ❑ The Cow Creek Road Bridge is located approximately seven miles south of the Town of Drummond. The 13-foot bridge is a timber structure constructed in the early 1980s. It serves as a farm to market route for four local ranchers and provides access to seven permanently inhabited homes, as well as providing access for recreational traffic accessing state land, block management areas, and Lolo National Forest. The route is a designated mail and school bus route. Traffic volume is estimated to be about 100 vehicles per day. The bridge currently has no posted weight restriction. Closure of the bridge would result in a 13 mile detour from one side of the bridge to the other side.

Problem – The three bridges have the following deficiencies.

- ❑ The Boulder Creek Road Bridge (BC1) has a sufficiency rating of 62.9. Deficiencies include:
 - steel truss is made of mild steel and showing signs of corrosion,
 - steel cross bracing are loose and rusted,
 - only has two main supporting steel trusses, and
 - 16 feet wide and does not conform to current bridge standards.
- ❑ The Boulder Creek Road Bridge (BC2) has a sufficiency rating of 50.8. Deficiencies include:
 - undersized rough sawn timber stringers with signs of rotting throughout,
 - no bridge rail and guardrail,
 - located at “S” curve at both ends creating poor sight distances, and
 - 16 feet wide and does not conform to current bridge standards.
- ❑ The Cow Creek Road Bridge has a sufficiency rating of 54.7. Deficiencies include:
 - undersized sold sawn timber stringers with significant checking throughout,
 - timber plans are rotting, and there is worn and broken planks, and
 - does not allow for truck turning movement.

Solution – The project would:

- ❑ replace both of the Boulder Creek Road Bridges (BC1 and BC2) with single-span precast, prestressed, concrete tri-deck beam superstructures, and
- ❑ replace the Cow Creek Bridge with a reinforced concrete box culvert, utilizing county road crew to widen the roadway.

Project Status – As of November 15, 2012, \$264,036 in grant funds have been expended and the project is 100% completed. An additional \$12,371 was reverted to the TSEP program and was made available for projects awarded conditional grants.

**City of Roundup
Musselshell County
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,618 points out of a possible 5,000 points and ranked 26th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Musselshell County for the 2013 Biennium in the amount of \$500,000.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 500,000	Grant awarded
Commerce	Coal Board Grant	\$ 500,000	Grant awarded
USDHS	FEMA Grant	\$ 142,483	Grant awarded
City	Cash	\$ 126,070	Committed by resolution, partially expended on PER
DNRC	RRGL Grant	\$ 100,000	Grant awarded
Project Total		\$1,368,553	

Median Household Income:	\$23,144	Total Population:	1,922
Percent Non-TSEP Matching Funds:	63%	Number of Households:	708

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$25.55	-	Target Rate:	\$44.36	-
Existing Wastewater Rate:	\$19.92	-	Rate With Proposed TSEP Assistance:	\$45.47	103%
Existing Combined Rate:	\$45.47	103%	Rate Without TSEP Assistance:	\$49.48	112%

Project Summary

History – The water system in Roundup is supplied by two wells in an abandoned coal mine located south of the Musselshell River. The wells provided sufficient capacity, and the water meets all regulatory requirements. However, the water is considered undesirable by the community's residents due to high levels of iron and manganese. An infiltration gallery on the north side of the river is also still connected to the system even though it has not been utilized since the 1970s due to low yields. The original distribution system, comprised chiefly of cast iron pipe, was installed in 1908, and over 45,000 feet of the original cast iron pipe still remains in use. The city, along with several other communities along the Musselshell River, is currently pursuing the development and construction of a regional water system to replace its source.

Problem – The water system has the following deficiencies:

- ☐ high levels of iron and manganese,
- ☐ condition of transmission line from wells to clearwell questionable,
- ☐ infiltration gallery potentially under the influence of surface water,
- ☐ clearwell leaking in excess of 84,000 gallons of chlorinated water per day to groundwater,
- ☐ aged and deteriorated cast iron pipe results in two to three leaks each month,
- ☐ over 36% of existing distribution system unable to deliver recommended fire flows due to undersized mains and one-inch plus of rust and scaling,
- ☐ over half of the valves on the original distribution system are inoperable,
- ☐ iron concentration 68 times as high as the maximum contaminant level (MCL) specified in the national secondary drinking water quality regulations due to iron deposits and the cast iron lines in the distribution system, and
- ☐ water meters are at the end of their useful life and need to be replaced.

Solution – The project would:

- ☐ install new pumps in the supply wells and by-passing the clearwell to pump directly from the supply wells to the distribution system,
- ☐ install a new chlorination system at the supply well,
- ☐ replace the transmission line crossing the Musselshell River, and
- ☐ replace approximately 4,380 feet of cast iron water mains with eight-inch PVC mains.

Project Status – As of November 15, 2012, \$360,144 in grant funds have been expended and the project is 75% completed.

**Roberts-Carbon County Water & Sewer District
Carbon County
Wastewater System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,614 points out of a possible 5,000 points and ranked 27th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Roberts-Carbon County Water & Sewer District for the 2013 Biennium in the amount of \$500,000.**

Funding Source	Type of Funds	Amount	Status of Funds
USDA	RD Loan	\$ 346,000	Loan approved
USDA	RD Grant	\$ 236,000	Grant awarded
Commerce	TSEP Grant	\$ 500,000	Grant awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
District	Cash	\$ 3,000	Committed by resolution, partially expended on PER
Project Total		\$1,185,000	

Median Household Income:	\$30,912	Total Population:	258
Percent Non-TSEP Matching Funds:	58%	Number of Households:	111

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$45.87	-	Target Rate:	\$59.25	-
Existing Wastewater Rate:	\$19.86	-	Rate With Proposed TSEP Assistance:	\$68.83	116%
Existing Combined Rate:	\$65.73	111%	Rate Without TSEP Assistance:	\$100.69	170%

Project Summary

History – The wastewater system serving the unincorporated community of Roberts was constructed in 1922. The last major improvements were in 2008 when the district replaced one pump and rebuilt the other one. The Montana Department of Environmental Quality (MDEQ) issued a request in 2008, for additional information to demonstrate compliance with the sanitation regulations, as deficiencies were identified during a subdivision review.

Problem – The wastewater system has the following deficiencies:

- ☐ high inflow and infiltration causing the lagoon level to rise quickly,
- ☐ lift station cannot keep up (the lagoon level has been within inches of breaching the dikes, causing the last two manholes to overflow, and releasing raw sewage into the streets and drainage ditches),
- ☐ insufficient detention times in the primary treatment lagoon resulting in inadequately treated wastewater,
- ☐ no confined space entry equipment,
- ☐ no metering equipment at the lagoon influent,
- ☐ inoperable automated controls at lift station,
- ☐ no backup power source for lift station, and
- ☐ problems with intake structure/piping at the lift station leading to clogged pumps.

Solution – The project would:

- ☐ replace approximately 1,295 feet of eight-inch collection mains with open cut pipe,
- ☐ rehabilitate approximately 6,458 feet of eight-inch collection mains with cured in place pipe,
- ☐ replace 18 manhole,
- ☐ rehabilitate seven manholes,
- ☐ rehabilitate lift station,
- ☐ install new intake piping structure with screens,
- ☐ install an emergency generator,
- ☐ repair automated controls,
- ☐ install lagoon influent meter, and
- ☐ install and repair confined space entry equipment.

Project Status – As of November 15, 2012, no grant funds have been expended and the project is 0% completed.

**Sand Coulee Water District
Cascade County
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,576 points out of a possible 5,000 points and ranked 30th out of 59 applications. **The Legislature awarded a TSEP Project Grant to Sand Coulee Water District for the 2013 Biennium in the amount of \$200,966.**

Funding Source	Type of Funds	Amount	Status of Funds
RDG	Grant	\$300,000	Application expected to be submitted May 2010
Commerce	TSEP Grant	\$282,966	Grant awarded
Project Total		\$582,966	

Median Household Income:	\$32,813	Total Population:	181
Percent Non-TSEP Matching Funds:	51%	Number of Households:	72

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$25.00	65%	Target Rate:	\$38.28	-
Existing Wastewater Rate:	NA	-	Rate With Proposed TSEP Assistance:	\$38.28	100%
Existing Combined Rate:	NA	-	Rate Without TSEP Assistance:	\$74.41	194%

Project Summary

History – The water system in Sand Coulee was constructed prior to 1959. A water users association was formed to operate the water system in 1959, and in 2009, the Sand Coulee Water District was formed. The water system includes: two groundwater wells; a 100,000-gallon steel bolted storage tank that was erected in 1960; and a distribution system comprised of approximately 1,230 feet of six-inch PVC pipe installed in 1987, 400 feet of six-inch transit pipe, and approximately 4,000 feet of four-inch main. Homes in the district utilize on-site septic systems for wastewater disposal.

Problem – The water system has the following deficiencies:

- ☐ source water does not meet requirements for the present or design year populations,
- ☐ pump house and control facilities do not conform to design requirements,
- ☐ inadequate storage,
- ☐ distribution system contains a single fire hydrant that lacks adequate valving, is undersized and cannot deliver fire flows,
- ☐ distribution system contains deposited/settled granular coal/coal slag that is suspected to supply media for bacteria to thrive on/in, and
- ☐ no water meters on the well heads or on service connections.

Solution – The project would:

- ☐ drill three new wells, and
- ☐ construct a new pump house and controls.

Project Status – On October 26, 2011, Commerce received a letter from Sand Coulee Water District that the District was declining its TSEP Project Grant. This action resulted in an additional \$200,966 becoming available for projects awarded conditional grants.

**City of East Helena
Lewis and Clark County
Wastewater System Improvements
TSEP Project Grants
2013 Biennium**

This application received 3,575 points out of a possible 5,000 points and ranked 31st out of 59 applications. **The Legislature conditionally awarded a TSEP Project Grant to the City of East Helena for the 2013 Biennium in the amount of \$750,000. The City met start-up conditions, and on March 30, 2012, Commerce awarded the City \$750,000 in funds made available from unexpended debt service and reverted project funds.**

Funding Source	Type of Funds	Amount	Status of Funds
USDA	RD Loan	\$3,318,000	Loan approved
USDA	RD Grant	\$1,599,000	Grant awarded
Commerce	TSEP Grant	\$ 750,000	Grant awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
Project Total		\$5,767,000	

Median Household Income:	\$31,071	Total Population:	2,114
Percent Non-TSEP Matching Funds:	87%	Number of Households:	907

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$35.50	-	Target Rate:	\$59.55	-
Existing Wastewater Rate:	\$38.92	-	Rate With Proposed TSEP Assistance:	\$91.09	153%
Existing Combined Rate:	\$74.42	125%	Rate Without TSEP Assistance:	\$94.40	159%

Project Summary

History – The wastewater system in East Helena was constructed in the early 1900s. A lift station and the treatment facility were replaced in 2003. None of the old aerated lagoon system remains except the flow equalization pond, which was previously the first cell of the aerated lagoon system. In 2008, the city replaced a portion of gravity sewer mains in the north area of the collection system. Treated effluent is currently being discharged into Prickly Pear Creek with toxic levels of lead and copper, and new permitting requirements require a significant reduction in the lead, copper and zinc levels. The facility was also not designed to provide removal of nitrogen or phosphorus, which has become a significant nutrient related problem in the Helena valley. The Montana Department of Transportation installed storm water inlets that connect to the sanitary sewer system, which causes the treatment facility to become overwhelmed and discharging untreated effluent onto the ground in the grit chamber. Bids have been received to remedy the storm water issue, but the cost prohibits the city from completing the entire project.

Problem – The wastewater system has the following deficiencies:

- ☐ undersized and deteriorated ten-inch sanitary sewer line,
- ☐ storm drains connected to the city sewer system,
- ☐ storm water flows exceed capacity of grit chamber, and
- ☐ new permit limits for copper, lead and zinc.

Solution – The project would:

- ☐ replace approximately 1,760 feet of 10-inch main with a 15-inch main,
- ☐ install approximately 4,242 feet of storm water pipe of various sizes from 12-inch to 24-inch and separate from the sanitary sewer system, and
- ☐ install filtration at the treatment facility to remove metals.

Project Status – As of November 15, 2012, \$302,974 in grant funds have been expended and 0%.

**Crow Tribe for Crow Agency
Big Horn County
Water System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,564 points out of a possible 5,000 points and ranked 34th out of 59 applications. **The Legislature conditionally awarded a TSEP Project Grant to Crow Tribe for Crow Agency for the 2013 Biennium in the amount of \$750,000. The Tribal Government met start-up conditions, and on April 16, 2012, Commerce awarded the Tribal Government \$750,000 in funds made available from unexpended debt service and reverted project funds.**

Funding Source	Type of Funds	Amount	Status of Funds
HUD	ICDBG Grant	\$ 750,000	Grant awarded
Commerce	TSEP Grant	\$ 750,000	Grant awarded
EPA	Tribal Set-Aside Grant	\$ 650,000	Grant awarded
Commerce	Coal Board Grant	\$ 148,300	Grant awarded
DNRC	RRGL Grant	\$ 100,000	Grant awarded
Project Total		\$2,398,300	

Median Household Income:	\$22,438	Total Population:	1,552
Percent Non-TSEP Matching Funds:	68%	Number of Households:	336

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	NA	-	Target Rate:	\$43.01	-
Existing Wastewater Rate:	NA	-	Rate With Proposed TSEP Assistance:	\$92.64	215%
Existing Combined Rate:	\$40.00	93%	Rate Without TSEP Assistance:	\$99.92	232%

The projected monthly cost to operate these systems is estimated to be approximately \$92.64 per residential user. The tribal government has set a flat rate of \$45 per month for water and wastewater service. The tribe will pay for the operation and maintenance of the two systems by making up the difference of \$47.64 with revenue from its economic development or business endeavors.

Project Summary

History – The wastewater system in Crow Agency was first built in 1911 by the Bureau of Indian Affairs (BIA). The collection system consists of approximately nine miles of gravity sewer, one mile of force main, and approximately 190 manholes. The gravity collection mains range in size from four to 12 inches in diameter; pipe materials include vitrified clay and polyvinyl chloride pipe. The Apsaalooke Water and Wastewater Authority (AWWA) was formed by the Crow Tribe in 2004 with the intent of taking over both the water and wastewater systems from the BIA. A multi-phased master plan to improve the water and wastewater infrastructure is currently being implemented in Crow Agency: a new interceptor line was completed in 2008, a new aerated lagoon treatment system is currently under construction, and the replacement of water and wastewater lines are currently in design. The proposed project would be the fourth phase.

Problem – The water system has the following deficiencies: noncompliance with the long term two enhanced surface water treatment rule for cryptosporidium treatment; undersized distribution lines; leaking distribution lines; and dead-end distribution lines.

Solution – The project would:

- ☐ install an ultraviolet (UV) disinfection system, and
- ☐ replace approximately 8,000 feet of four-inch distribution lines with six-inch lines.

Project Status – As of November 15, 2012, no grant funds have been expended and the project is 0% completed.

**Hill County
Bridge System Improvements
TSEP Project Grant
2013 Biennium**

This application received 3,535 points out of a possible 5,000 points and ranked 35th out of 59 for funding in the 2013 biennium. **The Legislature conditionally awarded a TSEP Project Grant to Hill County for the 2013 Biennium in the amount of \$174,082. The County met start-up conditions, and on September 9, 2011, Commerce awarded the County \$174,082 in funds made available from unexpended debt service and reverted project funds.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$174,082	Grant awarded
County	Cash	\$132,924	Committed by resolution, partially expended on PER
County	In-Kind	\$ 41,158	Committed by resolution
Project Total		\$348,164	

Median Household Income:	\$30,781	Total Population:	16,673
Percent Non-TSEP Matching Funds:	50%	Number of Households:	6,457

Project Summary

History – Hill County has identified two bridges that are in critical condition and in need of replacement.

- ❑ The Fresno Dam Bridge is located approximately 14 miles west of City of Havre and crosses over the Fresno Dam spillway. The 214-foot bridge is a one-lane, single-span steel truss structure constructed in 1937. There is significant residential, commercial and recreational use of the bridge, and is considered a major farm to market route for 48 sections of farm/ranch land. There are eight permanent residents northeast of the bridge and about 50 cabins along the east shore of the reservoir that are used primarily during the summer months; however, some of the cabins are used year round. Traffic volume is estimated to be 50 to 100 vehicles per day in late fall and winter and 400 per day in summer. The bridge accommodates only one lane of traffic, but has no current weight restriction. The bridge is the only Milk River crossing for 13 miles downstream, resulting in a detour length of 34 miles and 16 miles upstream, resulting in a detour length of 62 miles from one side of the bridge to the other side.
- ❑ The Herman Bridge is located 14 miles north of the community of Rudyard across Little Sage Creek. The 40-foot bridge is a two-lane, two-span timber structure constructed in 1947. Secondary Route 255 serves as a major farm to market route for 108 sections of farm and ranch land, and 160 residents in the Sage Creek Hutterite Colony, located near the Canadian border. It also connects the community of Goldstone to Rudyard. The road serves as school bus and mail route. Traffic volume is estimated to be 190 vehicles per day. The bridge currently has no posted weight restriction. Closure of the bridge would result in a 20-mile detour from one side of the bridge to the other side.

Problem – The two bridges had the following deficiencies.

- ❑ The Fresno Dam Spillway Bridge has a sufficiency rating of 63.3. Deficiencies include: minor pitting and rusting on the steel stringers, steel floor beams, and truss members; moderate paint loss has occurred on top sides of many of the truss members and floor beams; minor vehicular damage is present in a few locations; the timber deck planking exhibits heavy staining and end checking; water spotting observed throughout underside of the deck, core samples of the decking at three of seven locations indicated minor to moderate core rot; asphalt overlay has significant number of large, open transverse cracks; wheel ruts and potholes starting to form in asphalt overlay; and minor spalling of concrete.
- ❑ The Herman Bridge has a sufficiency rating of 79.5. Deficiencies include: timber piles have rot, splits, and rotations; sloughing is occurring under both timber backwalls; abutments and pile caps have rot, checking, and rotation; wingwalls show signs of sloughing and erosion, and minor rot; timber stringers have checking and rotation; the timber deck planking exhibit heavy staining, end checking, and localized crushing and failure; asphalt overlay has loose patches of gravel, and asphalt and potholes are present; and timber curbs and low rails have core rot and some collision damage.

Solution – The project would:

- ❑ Replace the bridge decking on the Fresno Dam Bridge with corrugated metal decking, and
- ❑ Replace the Herman Bridge with two, nine-foot corrugated steel culverts, utilizing county crews.

Project Status – As of November 15, 2012, \$161,849 grant funds have been expended and the project is 50% completed.

**Custer County
Wastewater System Improvements
TSEP Project Grant – CONDITIONAL
2013 Biennium**

This application received 3,567 points out of a possible 5,000 points and ranked 32nd out of 59 applications. **The Legislature conditionally awarded a TSEP Project Grant to Custer County for the 2013 Biennium in the amount of \$750,000.**

Funding Source	Type of Funds	Amount	Status of Funds
Commerce	TSEP Grant	\$ 750,000	Grant awarded
Commerce	CDBG Grant	\$ 450,000	Grant awarded
USDA	RD Grant	\$ 388,000	Grant awarded
USDA	RD Loan	\$ 288,000	Loan approved
County	Cash	\$ 118,000	Committed by resolution
Project Total		\$1,994,000	

Median Household Income:	\$32,938	Total Population:	250
Percent Non-TSEP Matching Funds:	62%	Number of Households:	92

	Monthly Rate	Percent of Target Rate		Monthly Rate	Percent of Target Rate
Existing Water Rate:	\$62.16	-	Target Rate:	\$63.13	-
Existing Wastewater Rate:	\$36.38	-	Rate With Proposed TSEP Assistance:	\$114.11	181%
Existing Combined Rate:	\$98.54	156%	Rate Without TSEP Assistance:	\$148.68	236%

Project Summary

History – The wastewater collection system serving a neighborhood on the northeast edge of the City of Miles City was constructed in the early 1900s. The collection system is connected to the city's wastewater treatment and collection system. Over the years, laterals have been constructed from this line mostly by neighbors getting together and installing short runs of primarily six-inch line. In 1953, the county created a rural improvement district (RID) to provide an entity to oversee the collection system and to charge annual assessments. Most of the RID is within the boundaries of the Custer County Water and Sewer District (CCWSD), which was created in 1976. The CCWSD currently provides water service to the RID neighborhood, which is supplied by the city. The CCWSD will own the wastewater collection system that is being proposed once it is constructed.

Problem – The wastewater collection system has the following deficiencies:

- ☐ collection lines were not installed with adequate grades,
- ☐ laterals that connect to the old Pine Hills outfall line are inadequate,
- ☐ outfall line is 110 years old, made of clay, has numerous areas of broken pipe, no pipe at crown, holes in the pipe, low areas, tree roots, and service tap problems, and
- ☐ manholes are in generally poor condition.

Solution – The project would construct a new collection system consisting of:

- ☐ approximately 7,500 feet of eight-inch gravity main,
- ☐ approximately 670 feet of four-inch force main,
- ☐ 28 manholes, and
- ☐ two lift stations.

Project Status – As of November 15, 2012, \$0 have been expended and the project is 0% complete.